

Chukchi Sea Planning Area

Oil and Gas Lease Sale 193
In the Chukchi Sea, Alaska

Final Supplemental Environmental Impact Statement

Volume II. Appendix E: Response to Comments



U.S. Department of the Interior
Bureau of Ocean Energy Management,
Regulation and Enforcement
Alaska OCS Region

August 2011

Alaska Outer Continental Shelf

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Volume II. Appendix E: Response to Comments

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Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region

**U.S. Department of the Interior
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Regulation, and Enforcement
Alaska OCS Region**

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Introduction

In response to the July 21, 2010, U.S. District Court for the District of Alaska remand, BOEMRE has produced a Supplemental EIS (SEIS) that provides a robust analysis of potential environmental impacts of natural gas development and production from Lease Sale 193 and conducts a thorough review of incomplete information under 40 CFR 1502.22 (“1502.22”) identified in the Sale 193 Final EIS (Sale 193 FEIS). Availability of the Draft SEIS was announced on October 15, 2010 (75 FR 63504) and a 45-day public review and comment period commenced. During this period, BOEMRE held six public hearings and received more than 150,000 comments. Many of these comments requested that BOEMRE perform an analysis that takes into account the possibility of a blowout during exploration activities, in view of the *Deepwater Horizon* event. Accordingly, in March 2011, BOEMRE announced that it would incorporate a VLOS (Very Large Oil Spill) analysis into its ongoing SEIS process. Availability of the Revised Draft SEIS was announced on May 27, 2011 and another 45-day public review and comment period commenced. During this period, BOEMRE held seven public hearings and received more than 360,000 comments. Additional information regarding the review process for the Draft SEIS and Revised Draft SEIS, the public hearings, and the Government-to-Government meetings is provided in Section VI.B of this Final SEIS.

During both public comment periods, various government agencies, organizations, and individuals provided comments either through oral testimony, in writing, or electronically. Appendix E, combined with specific revisions to the SEIS itself, provides a comprehensive response to these public comments. In responding to comments, BOEMRE conducted a thorough review of the oral testimony received at public hearings and each written or electronic comment received. All relevant, substantive comments were grouped according to particular *issue categories* identified during the review. Relevant comments were identified as those pertaining to specific impacts to resource areas that could result from natural gas development and production or the Very Large Oil Spill (VLOS) scenario, and those pertaining to specific portions of the 1502.22 analysis. For each issue category, the following are provided:

- **Summary of Comments:** A definition and summary of the issue based on the comments received in a particular issue category.
- **Source of Comments:** A list of the types of governments, tribes, organizations, or other groups that produced comments in the particular issue category. Individual comments from the general public are indicated under a collective heading for General Public—these include form letters facilitated by non-governmental organizations that focus on environmental or economic issues.
- **Response to Comments:** A collective response by BOEMRE to the comments constituting the particular issue.

A great number of comments received via e-mail or compact disk were identical form letters or slight variations of the form letters. Again, specific responses are provided for relevant and substantive comments. Responses are not always provided in instances where a submittal does not comment on the content of the SEIS or the 1502.22 analysis, but instead offers a general opinion or simply recommends a specific decision that is not delegated to the Bureau. However, BOEMRE does provide responses to some recurring issues—even when not directly relevant—to better communicate the nature of the OCS Program and the NEPA process to the public.

BOEMRE also received and considered many comments of an editorial nature; for example: suggested word changes and corrections, requests for clarification, questions regarding citations, etc. Where appropriate, BOEMRE made the suggested revisions to the Final SEIS—these revisions constitute BOEMRE’s response to editorial comments.

All substantive comments received during the comment period have been included within this volume of the Final SEIS. All comments received are part of the public record, and are available to the decision maker during the deliberation process for deciding between the lease sale alternatives analyzed in the Sale 193 FEIS and the Sale 193 Final SEIS.

Issue 1. Sound science and science-based decision making.

Summary of Comments

The majority of comments stressed the need to incorporate sound science into OCS decision-making, as follows:

- BOEMRE should ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science, adequate analysis, and a basic respect for Arctic wildlife.
- The agency must identify critical missing information and develop an approach for gathering and synthesizing that information before it proceeds with a leasing decision.
- The SEIS undercuts sound environmental stewardship and decision making for our oceans.
- The decision to release the SEIS goes against the Obama administration's commitment to science-based decision-making; against President-elect Obama's comments from December 17, 2008, regarding science-based decision-making; against Secretary Salazar's commitment to scientific integrity as reflected in the recently issued Order 3305—Ensuring Scientific Integrity within the Department of Interior; and against Secretary Salazar's September statement that “we must be thoughtful and responsible in developing...[Alaska's] resources so that we protect Alaska's fisheries, wildlife, and remarkable beauty for generations to come...In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward.”
- BOEMRE should take heed of the Presidential National Ocean Policy Task Force statement regarding the need for “[i]mprovement of the scientific understanding of the Arctic system and how it is changing in response to climate-induced and other changes”
- One comment called agency scientists liars, and suggested they would be fired if they told the truth.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

Sound Science. BOEMRE uses sound science in fulfilling its mandate under the OCS Lands Act to protect the environment, including Arctic wildlife. Much of the information used in BOEMRE's analyses is derived from the BOEMRE Environmental Studies Program (ESP), a robust program which identifies and obtains information regarding a variety of pertinent environmental issues. Since 1975, over \$340 million have been commissioned through the ESP alone, for studies of the Alaska OCS region. These studies have yielded more than 400 study reports and more than 300 articles published in peer-reviewed scientific journals. Parties interested in learning more about past, present, and future research in the Alaska OCS region, and those wishing to obtain specific studies, are encouraged to visit the Alaska Regions ESP website: <http://alaska.boemre.gov/ess/index.htm>. An

additional source of studies information is the Environmental Studies Program Information system (ESPIS) located at <http://www.gomr.boemre.gov/homepg/espis/espismaster.asp?appid+1>

Additional responses to comments regarding “the need to collect missing science” and the adequacy of BOEMRE’s impacts evaluation are provided elsewhere in this Appendix, where these issues are discussed in detail.

Environmental Stewardship and Science-Based Decision Making. BOEMRE takes its environmental stewardship obligation and commitment to science-based decision-making very seriously. BOEMRE also embraces the Secretary’s statement concerning environmental stewardship. In fulfilling its NEPA obligations, BOEMRE carefully analyzed each potentially affected environmental resource in and around the proposed action area, with due consideration for climate change and Alaska’s unique environmental characteristics. The BOEMRE team of analysts includes experts in relevant disciplines, including, but not limited to, oceanography, marine biology, cultural anthropology, geology, and economics. These analysts provided focused technical analysis of all reasonably foreseeable environmental impacts associated with natural gas development and production, as well as the potential effects of a hypothetical very large oil spill. The 40 CFR 1502.22 analysis within Appendix A is also based on careful review of each individual item of incomplete or missing information by BOEMRE technical analysts. The goal of this process is to provide the decision maker, in this case the Secretary of the Interior, with the relevant environmental, social, and economic information he needs to make an informed choice as to whether to reaffirm Lease Sale 193.

Scientific Integrity. BOEMRE embraces the Department of the Interior February 2011 policy on integrity of scientific and scholarly activities to inform management and public policy decisions. The Department of the Interior which includes BOEMRE supports a culture of scientific and scholarly integrity. One of the policy elements ensures that “the public communications policies provide procedures by which scientists and scholars may speak to the media and the public about scientific and scholarly matters based on their official work and areas of expertise. In no circumstance may public affairs officers ask or direct Federal scientists to alter scientific findings.” For information is at: <http://www.doi.gov/news/pressreleases/Salazar-Announces-New-Scientific-Integrity-Policy-and-Designation-of-Departmental-Science-Integrity-Officer.cfm>.

Issue 2. Public review and comment process.

Summary of Comments

Various comments took issue with the public review and comment period provided for the Draft SEIS and Revised Draft SEIS. There were several requests that the commenting deadline be extended to give more time for community input and for additional scientific studies to be completed. Also, several comments asserted that BOEMRE’s efforts to notify the public of its Draft SEIS, Revised Draft SEIS, or public meetings were inadequate. Specific concerns included the following:

- BOEMRE should respect the calendar and time of year when scheduling meetings in each village.
- BOEMRE failed to adequately advertise the public meetings.
- The document was seen for the first time on the day of the public meeting.
- Public meetings lose meaning and/or effectiveness if participants aren’t familiar with the particular documents under discussion.
- It is difficult to find the time to read an entire EIS.
- The language barrier makes it difficult to read and comment on EISs. It would be nice to get assistance from a lawyer but that costs too much money.

- Information provided by community members does not reach Congress or receive proper consideration by decision makers.
- The agency should provide communities with feedback on how their comments were considered, and what decisions were made.
- Whaling captains should be notified of public meetings by phone or e-mail.
- The Point Hope hearing on the Draft SEIS was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.
- BOEMRE should meet its government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. No government-to-government meeting was held for the Draft SEIS after Point Hope had to cancel an initial meeting due to conflicts; Native Village of Point Hope requests that BOEMRE reschedule the missed government-to-government meeting.
- In Barrow, BOEMRE held the public hearing on the Draft SEIS at the same time as the government-to-government meeting with the Iñupiat Community of the Arctic Slope (ICAS), causing board members to have to choose between the two meetings.
- Regarding the November 9 public meeting in Anchorage: the room was too small and many people were forced to stand; there was no microphone, which made it very difficult to hear those testifying; BOEMRE did not allow adequate time among those who testified; some speakers were permitted more than their allotted two minutes while others were cut off after that time; BOEMRE did not provide all those who signed up an opportunity to speak because the meeting shut down at exactly 10:00 p.m.
- There was ambiguity regarding the date of closure for the Draft SEIS comment period.
- Several parties inquired about the reference to NOAA as a Cooperating Agency that appeared on the Draft SEIS Title Page.

Comments specific to the Revised Draft SEIS process included:

- With the exception of the Native Village of Kotzebue, BOEMRE did not consult with the Northwest Arctic Borough's six coastal villages (Noatak, Kivalina, Deering, Buckland, Selawik, and Noorvik) that could potentially be impacted by the proposed action. In light of EO 13175, BOEMRE should have met with the leadership of these villages to describe the scope of the Revised Draft SEIS and criteria for commenting. Another comment also asserted the need to consult with Savoonga, Gambell, Kivalina, and Nome.
- BOEMRE should advertise the project and meeting information on KOTZ to increase public awareness and knowledge.
- After the reorganization, the safety and enforcement component of the Bureau should visit North Slope villages to discuss how they will regulate offshore activities.

Other comments spoke to a variety of broader concerns with respect to the public review and comment process:

- Tribal and regional governments need more money from the federal government to sufficiently represent their constituencies in the NEPA process.
- The agency should provide the full public comment letters with annotations by BOEMRE indicated right on them for response to comments.
- The agency should provide the entire transcripts from each public meeting.
- Transparency requires the agency to post hearing transcripts on their website.
- The SEIS should include Native points of view, as well pictures of Native people.

- Communities would benefit if BOEMRE shared the findings of more of its scientific studies, especially those describing animal populations and distributions the sea.

Several comments commended BOEMRE for improvements to its public hearing process for the Revised Draft SEIS, including the following:

- BOEMRE improved by providing more materials and explanation at the meetings, attentive listening, more effective advertizing, and flexibility in rescheduling meetings.
- The format of the public meeting was described as “pleasing and refreshing,” and this was also described as a big step in improving communication.

Another comment, however, described a “troubling event” at one public meeting for the Revised Draft SEIS, where a member of the audience asked a question, and “an oil company employee offered an answer to a technical issue that was incorrect.” According to the commenter, the misleading statement was not corrected by BOEMRE staff.

A final comment suggested that Native communities have been saying “No” for years, but the government still comes back again and again, wanting the same thing.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

Information about BOEMRE’s extensive outreach efforts during the Sale 193 SEIS process is provided in Section IV.B of the SEIS.

Extended Time to Comment. Extension of the public comment period was unnecessary given the limited scope of the supplemental analysis. Comments asserting the need for additional studies are addressed within Issue Category 7.

Availability and Efforts to Notify. BOEMRE took deliberate steps to announce the availability of the Draft SEIS, to disseminate the Draft SEIS, to meet with interested parties, and to publicize the series of meetings scheduled specifically for this process. These efforts included the following:

- Publishing a Notice of Intent to Prepare the SEIS as well as a Notice of Availability in the *Federal Register* on October 15 (75 FR 63504).
- Updating the BOEMRE website and providing a link to the Draft SEIS (link added on October 8, 2010).
- Mailing hard copies of the Draft SEIS to Tribal and local governments, local libraries, and other parties who expressed interest in BOEMRE NEPA documents in the past (Mailed on October 14, 2010).
- Scheduling a series of meetings with both Tribal and local governments in five potentially affected villages as well as Anchorage: November 1-5 and November 9, respectively.
- Placing large newspaper ads to appear in two editions each of the Arctic Sounder, Fairbanks News-Miner, and Anchorage Daily News.
- Running public service messages on the two public radio stations serving the North Slope—KBRW in Barrow and KOTZ in Kotzebue—and, providing the same messages to commercial radio station KBYR (which is heard in several communities of the North Slope).

- Providing our community advisories to news media assignment editors from at least two dozen radio and television stations and newspapers in the North Slope, Northwest, Anchorage, Fairbanks and Southeast (including the Alaska Public Radio Network), and thereby encouraging their possible follow up with additional announcements or stories.

BOEMRE also took deliberate steps to announce the availability of the Revised Draft SEIS, to disseminate the Revised Draft SEIS, to meet with interested parties, and to publicize the series of meetings scheduled specifically for this process. These efforts included the following:

- Publishing the Notice of Availability of the Revised Draft SEIS in the *Federal Register* and posting the Revised Draft SEIS on the BOEMRE website on May 27, 2011 (76 FR 30956).
- Mailing hard copies of the Revised Draft SEIS to Tribal and local governments, local libraries, and other parties who had expressed interest in BOEMRE NEPA documents in the past (Mailed on May 19, 2011).
- Scheduling a series of meetings with both Tribal and local governments in five potentially affected villages as well as Anchorage: June 21 through June 30.
- Placing large newspaper ads to appear in two editions each of the Arctic Sounder, Fairbanks Newsminer, and Anchorage Daily News.
- Running public service messages on the two public radio stations serving the North Slope—KBRW in Barrow and KOTZ in Kotzebue—and, providing the same messages to commercial radio station KBYR (which is heard in several communities of the North Slope).
- Providing news media assignment editors with our community advisories and, thereby, the opportunity to follow up with additional announcements or stories.

Examples of special accommodations made by BOEMRE in this process include adding Fairbanks to the list of meeting venues and rescheduling meetings in Wainwright at the request of that community.

Improving our Process. While the Bureau feels these combined efforts were more than adequate to satisfy its NEPA obligations, we remain committed to improving our public outreach efforts. In coming months, our BOEMRE Alaska OCS Region Community Liaison will update our current operational plan to improve public communication with potentially affected communities.

Several ideas are already under active consideration:

- Adding the Nome Nugget, Petroleum News, and Alaska Journal of Commerce to our published notices list.
- Ensuring notices of meetings are provided for community CB radio outreach.
- Ensuring community calendars are provided (with our schedule of meetings) for tribal and community organizations, schools, churches, media, and other stakeholders.
- Providing community advisories prior to or upon arriving in a village that allow for the scheduling of interview opportunities with BOEMRE team members who will be or are visiting the communities.
- Ensuring community calendars (with our schedule of meetings) are provided for tribal and community organizations, schools, churches, media, and other stakeholders.
- Providing flyers to the Northwest Arctic and North Slope school districts, so the children of potentially affected communities can take them home to share with their parents and elders.
- Sending postal notification to each box holder within the appropriate community.

- Seeking opportunities for public communication that coincide with cultural activities within potentially affected communities.
- Creating a local liaison position to help announce and explain BOEMRE's activities to community members.

Additional Accommodations Made. The BOEMRE Alaska OCS Region sends notification of all new NEPA documents to all persons who have signed up for its distribution list. All interested parties, including whaling captains, are encouraged to join the BOEMRE distribution list and specify whether they would prefer regular mail or e-mail notification. Individuals may sign up for the distribution list by calling BOEMRE Alaska OCS Region directly at (907) 334-5200.

For the Draft SEIS, BOEMRE offered through e-mail and phone calls to reschedule the Native Village of Point Hope consultation by teleconference at the Village's earliest convenience. The necessity of scheduling the Point Hope public hearing on Election Day was a result of the logistical issues inherent to holding meetings in five potentially affected villages during the course of a week. While BOEMRE regrets any inconvenience this may have caused, the agency appreciates and thanks the community members who were able to share their concerns, as well as those who assisted several BOEMRE employees with submitting absentee ballots that day.

The government-to-government consultation with ICAS in Barrow took place at 6:30 pm, a time which ICAS selected. BOEMRE's offer to consult with ICAS earlier in the day was not accepted—so the BOEMRE team was split such that two representatives attended the ICAS consultation. Special thanks are due to those ICAS members who, after attending the consultation, were able to take part in the public hearing that had only been underway since 7 pm (the hearing ended at 10 pm).

At the Barrow public meeting it was noted that most of the materials announcing the Draft SEIS and publicizing public meetings listed November 29, 2010, as the last day of the comment period; however, at least one BOEMRE document listed November 30 as the final day. In response, the Deputy Regional Director of BOEMRE's Alaska OCS Region stated that comments would be accepted through November 30. BOEMRE did, in fact, accept public comments received through November 30, 2010.

NWAB Villages. During the Revised Draft SEIS comment period, commenters suggested that BOEMRE contact other tribal governments. BOEMRE has invited government-to-government consultations with the Native Village of Selawik, Native Village of Noatak, Noorvik Native Communities, Native Village of Kivalina, Native Village of Buckland, and Native Village of Deering. However, the tribal governments were unable to meet with BOEMRE.

Role of NOAA in the SEIS Process. NOAA was a cooperating agency on the Sale 193 FEIS. On October 5, 2010, the BOEMRE published in the *Federal Register* a Notice of Intent to Prepare a Supplemental Environmental Impact Statement: Outer Continental Shelf, Alaska OCS Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193. This document invited other Federal agencies, and State, Tribal, and local governments to consider becoming cooperating agencies in the preparation of this SEIS. NOAA and the other governmental entities did not accept this invitation to act as cooperating agencies. The Draft SEIS [BOEMRE, 2010] incorrectly listed NOAA as a cooperating agency). Although not a cooperating agency for the Sale 193 SEIS, NOAA and BOEMRE collaborated on the Revised Draft SEIS. The SEIS recognizes the collaboration and review by NOAA offices at Section VI.D.

Accuracy of Testimony. BOEMRE staff endeavor to allow members of the public to speak at public hearings and do not always correct speakers that may appear to provide an incorrect, or misleading statement. BOEMRE staffs at the meeting typically do not have the technical expertise to respond to every issue that may arise. BOEMRE staff do review the comments made at these public hearings and ensure that the Final document contains accurate information regarding all points at issue.

Improvements. The BOEMRE appreciates the comment on the June 2011 public hearing process. BOEMRE implemented many suggestions and constructive critiques from the November 2010 public hearing process. BOEMRE continues to strive to make the public hearing process both informative to the participants, as well as a forum to engage the participants in providing public comments to the agency.

Including Public Comments. BOEMRE has considered the suggestion to annotate the comments to indicate those parts to which responses were made. The Council on Environmental Quality regulations gives deference to an agency as to the format to respond to substantive comments (40 CFR 1503.4). Due to the exceptionally voluminous response, BOEMRE has prepared the Response to Public Comment section in a summary format.

Transcripts. When BOEMRE holds public hearings for environmental reviews, the hearing results in a hearing transcript. Sometimes those transcripts are included in the Final EIS in their entirety. The agency's reason stated in past EIS documents for not including the hearing transcript in entirety was because of the length of the transcripts. The public hearing transcripts on the Draft SEIS and Revised Draft SEIS for Sale 193 will be included in the Final SEIS. Public hearing transcripts are posted on BOEMRE Alaska Region website at: <http://alaska.boemre.gov/ref/Hearings1.htm>. If there is a hearing transcript that the commenter is interested in and this transcript does not appear on the website, BOEMRE Alaska Region encourages the commenter to contact them. In addition, the BOEMRE, Alaska Region Final EIS documents can be accessed at: http://www.alaska.boemre.gov/ref/eis_ea.htm.

Obligation to Seek Comments. Even when a community has objected to the prospect of OCS leasing, exploration, or development in the past, BOEMRE must carry out its responsibilities under NEPA and the OCSLA. BOEMRE must solicit and gather public input at each stage of the OCSLA process, and during preparation of every EIS.

Community Calendars. BOEMRE strives to work with community and tribal leaders when setting up meetings in Alaska communities. Specifically, BOEMRE Alaska OCS Region's Community Liaison works closely with the Alaska communities on the timing of these meetings. For example, BOEMRE scheduled the public hearing on the Revised Draft SEIS in each village to avoid conflicts with Nalukataq (annual whaling festival). BOEMRE recognizes many communities live a subsistence lifestyle and that there needs to be flexibility when subsistence activities are ongoing in the community.

Feedback Regarding the Decision. BOEMRE Alaska Region is considering when to return to the communities to meet with community leaders, tribal leaders, and residents to explain how comments were incorporated in the Final SEIS, and to explain the decision of the Secretary of the Interior. The Secretary of the Interior is expected to make his decision no later than October 3, 2011. BOEMRE staff will contact key community and tribal leaders to discuss their interest in BOEMRE returning to the communities for meetings. BOEMRE is also prepared to share information regarding its reorganization.

Native Views and Pictures. BOEMRE analysis in the 193 FEIS and Final SEIS incorporates information on subsistence lifestyles and traditional local knowledge as expressed by the Alaska Native people in the local communities. BOEMRE also incorporates the view of tribal leaders with the government-to-government consultations. During our public hearing process we were able to meet and individually speak with many Alaska Natives in the communities. Additional quotations from members of the coastal communities are integrated into the text of the Final SEIS, in response to public comment. The Final SEIS also includes pictures to further tell the story of living a subsistence lifestyle.

Encouraging Participation in the NEPA Process. BOEMRE response to comments requesting funding, etc to assist people with reading and commenting on EISs is limited. Assistance from a lawyer to read any environmental document from the agency is not within scope of the agency authority to provide to an individual. However, BOEMRE endeavors to assist in explaining the agency environmental documents and responding to any questions during the review period. BOEMRE is open to exploring this issue at future community meetings.

Sharing BOEMRE's Science. BOEMRE shares the findings from its scientific studies in a number of ways, including technical reports, peer-reviewed journal articles, annual public conferences, periodic workshops, website dissemination, and occasional project specific community meetings. The BOEMRE also publishes Ocean Science, which can viewed at http://www.gomr.boemre.gov/homepg/regulate/environ/ocean_science/. The environmental documents that BOEMRE prepares include the findings of BOEMRE scientific studies, as well as relevant studies from other organizations. The web portal for agency information about environmental studies is posted at: <http://alaska.boemre.gov/ess/index.HTM>.

Advertizing on KOTZ. BOEMRE appreciates the suggestion to advertize on KOTZ as a way of increasing community awareness and participation.. BOEMRE continues to make extensive community outreach efforts on projects and welcomes suggestions on improving the sharing of information.

Issue 3. Range of alternatives is insufficient.

Summary of Comments

Several comments state that the range of alternatives analyzed in the SEIS is inadequate for the following reasons:

- The SEIS alternatives are inadequate due to a lack of connection to baseline science, differing levels of impacts, and lack of a clear basis for choice among the alternatives.
- The agency should explore alternatives that allow it to maintain the status quo on Lease Sale 193 leases while it obtains essential missing information, e.g. continuing the suspension of leases pending further research and analysis to inform future decisions about whether, where, and how to implement the leases.
- Lease Sale Alternatives, which are based on distances of activities from shore, ignore the reliance of residents on migratory marine resources, as well as the importance of certain habitat.
- The SEIS should be revised to include alternatives that incorporate protections of subsistence and marine resources; specifically, time and area restrictions, other measures developed through the Conflict Avoidance Agreement (CAA) negotiation process, and requirements for ongoing negotiated measures should be incorporated.
- A modified alternative that protects important ecological areas, including the sixty-mile coastal corridor and Hanna Shoal, should be developed. Norway's approach to protecting ecologically important areas could serve as an example.
- The SEIS should include an alternative that incorporates provisions of 2011 CAA and any other measures that might be necessary in light of changed operational, hunting, or environmental conditions (as identified in direct negotiations with Alaska Eskimo Whaling Commission).
- While it is true that coastal deferrals would minimize many impacts from a VLOS, not all adverse impacts are correlated with SEIS alternatives. By only looking at the lease sale alternatives, the VLOS analysis is insufficient. For example, a VLOS in an offshore area

utilized by cetaceans may have very significant feeding implications depending on the location, size, timing and duration of the spill.

- Missing information precludes the formulation of an adequate range of alternatives. The suggestion was made that BOEMRE reframe the alternatives and incorporate a conservative precautionary approach designed to avoid adverse impacts, where they cannot be reliably quantified or qualified due to lack of available information.
- The similarity in potential impacts among the SEIS action alternatives is evidence that BOEMRE did not analyze an adequate range of alternatives. One commenter specifically suggested that BOEMRE consider alternatives that include time and area restrictions to protect migrating bowhead whales.
- If all alternatives result in the same or similar effects, then the range of alternatives for lease sale analysis may be insufficient and require amendment.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations

Response to Comments

BOEMRE has retained for analysis within this Final SEIS the same alternatives analyzed in the Sale 193 FEIS (USDOI, MMS, 2007), which the SEIS supplements. A full discussion of alternatives considered for Lease Sale 193, including those alternatives considered but not carried forward for analysis, was provided in Section II.B.2 of the Sale 193 FEIS. The analyses and conclusions in the Sale 193 FEIS are incorporated into the SEIS by reference and will inform the Secretary's decision on whether to affirm, modify, or cancel Lease Sale 193.

Purpose of the SEIS. The District Court remanded Lease Sale 193 to BOEMRE to satisfy its obligations under NEPA in accordance with the Court's opinion. BOEMRE was instructed to address three concerns, as follows:

1. Analyze the environmental impact of natural gas development.
2. Determine whether missing information identified by BOEMRE in the 193 FEIS was essential or relevant under 40 CFR 1502.22.
3. Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

Protecting Migratory Species and Subsistence. The Alternatives considered in the Sale 193 FEIS and SEIS include consideration of coastal deferral corridors intended to provide additional protection of migratory pathways, which in turn would help protect subsistence. Additional mitigation measures such as time and area restrictions would receive further consideration upon proposal of a specific activity, e.g., an exploration plan or ancillary activity. Additionally, the local communities and oil exploration companies have in the past been able to negotiate private agreements which tend to further reduce potential impacts.

Additional Analysis. To address the District Court's first concern, the Final SEIS provides additional analysis of the potential effects of natural gas development and production. To address the District Court's second and third concerns, BOEMRE undertakes a thorough analysis of all items of incomplete information referenced in the Sale 193 FEIS. This analysis is contained within Appendix A of the SEIS. Going beyond the court's remand, BOEMRE also elected to include a hypothetical very large oil spill scenario and analysis. These analyses will provide the decision maker with additional information to affirm, modify, or cancel Lease Sale 193

New or Revised Alternatives. In preparing this SEIS, BOEMRE found no reason to reformulate the range of alternatives. Neither the District Court’s remand nor the language of 40 CFR 1502.22 require formulation of new alternatives, and there is nothing in BOEMRE’s present analysis to suggest such action would be appropriate. In addition, no new information has come to light subsequent to the Sale 193 FEIS that would empirically support the development of new alternatives. Recently released studies tracking the migrations of bowhead whales, for example, merely confirm the understanding that these animals exhibit highly variable use of all portions of the proposed lease sale area. Established mitigation measures under the Marine Mammal Protection Act (MMPA) restrict certain activities during the more predictable spring (as opposed to the more variable fall) migration of bowhead whales. These remain sufficient to protect this resource. The reformulation or addition of alternatives would fail to strengthen the natural gas analysis or the VLOS analysis and could only unnecessarily complicate the relatively straightforward task set out under the District Court’s remand order.

It is true that various portions of the SEIS conclude that the potential effects of natural gas development and production would be similar under each action alternative. Such conclusions are attributable to the more limited scope of the natural gas scenario (i.e., no additional exploration seismic surveying, exploration drilling, platform emplacement, or development drilling) and the inherent uncertainty at the lease sale stage regarding the exact location of future development and production activities. Notable differences in potential impacts between alternatives do exist in terms of possible development and production locations. For example, selecting an alternative that incorporates a larger deferral area could increase the minimum potential distance between a platform and the shoreline, thereby reducing the potential for conflict with near-shore species and cultural activities, but also increasing the length of the gas pipeline and its associated effects. These differences are noted in relevant portions of Chapter IV of the SEIS analysis. The types of effects that could occur during a VLOS are also similar between alternatives due to the large areas that would be impacted regardless of the location of the spill’s source. Additional responses regarding the VLOS scenario and analysis (including commentary on the similarities and differences between alternatives) are provided in later Issue Categories.

Issue 4. Preferred Alternative

Summary of Comments

Most of the comments received on the Revised Draft SEIS expressed a preference as to which lease sale alternative should be selected. A few comments asked for clarification as to which lease sale Alternative is BOEMRE’s Preferred Alternative.

The National Marine Fisheries Service provided comments in a letter dated February 28, 2011, regarding the Draft SEIS. NMFS had recommended Alternative III prior to Lease Sale 193 and continues to recommend Alternative III in this supplemental process. NMFS states: “Alternative III would protect nearshore marine resources and reduces the potential for a catastrophic event to impact benthic habitats, migratory current corridors, and nearshore estuarine habitats. It would also increase the distance between sensitive nearshore areas and any discharges, emissions, and noise associated with drilling and platform installation and operations.” NMFS concludes that the Alternative III recommendation for a larger deferral area “offers a precautionary approach to afford protection of marine resources in a data limited environment.”

Source of Comments

- Federal Government (National Marine Fisheries Service)
- Tribal Governments and Alaska Native Organizations

- State Government
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Opinions and Recommendations. Comments that express general opinions or recommend specific decisions to be made by the Secretary of the Interior will be incorporated into the administrative record and available to the decision maker during the deliberative process for Lease Sale 193. BOEMRE will not provide specific responses to such comments.

BOEMRE incorporated NMFS' concerns in the Revised Draft SEIS and further addresses similar comments in the Final SEIS.

Agency's Preferred Alternative. Under NEPA, an agency's preferred alternative frequently takes into account factors beyond the environmental effects analysis contained within the document itself. Departmental regulations at 43 C.F.R. 46.420(d), which implement CEQ regulations at 40 C.F.R. 1502.14(e), describe the agency's preferred alternative as "the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors. The concept of 'agency's preferred alternative' is different from the 'environmentally preferable alternative,' although in some cases one alternative may be both."

Here, BOEMRE has determined that Alternative IV best fulfills its statutory mission and responsibilities, given all relevant economic, environmental, and technical factors. Chapter II, Section II.B.I has been revised to state BOEMRE's preferred alternative for the Sale 193 Final SEIS.

Issue 5. Suggested Mitigation

Summary of Comments

Some comments proposed new mitigation measures, changes to the way that BOEMRE handles mitigation, or changes to how BOEMRE regulates offshore oil and gas activities generally:

- BOEMRE should improve upon the mitigation measures identified in the Sale 193 FEIS because natural gas development and production will have impacts on the environment, natural resources, and subsistence lifestyle in addition to and different from those related to oil and gas development. Specifically, the SEIS lacks enforceable protections for subsistence and other resources in the Chukchi Sea.
- Once an oil company touches a place, they should be responsible indefinitely.
- Existing leases should be suspended until important subsistence areas are better protected.
- New policies should be put in place before drilling is allowed to go forward.
- Oil and gas activities should not occur when ice movements and/or conditions may pose safety issues.
- BOEMRE should investigate alternate oil spill cleanup techniques, especially bioremediation.
- BOEMRE should require lessees to adhere to the Open Water Season Conflict Avoidance Agreement.
- The SEIS should mandate or at least include discussion of relief funding for coastal villages in the event of environmental damage.

- Federal sale and royalty money should be used to fund revenue sharing programs for impacted communities.
- An oil spill relief fund should be established before the production phase.
- BOEMRE should apply the more stringent safeguards that have been incorporated into federal coal permitting.
- Inspection of operations in the Arctic should include persons knowledgeable in subsistence activities, with appropriate authority to regulate.
- Given the importance of government accountability and transparency, BOEMRE in future years should post user-friendly and extensive information on inspections, releases, etc.
- Adherence to the Final Recommendations of The Interagency Ocean Policy Task Force (in particular No. 2-Coastal and Marine Spatial Planning and No. 8-Changing Conditions in the Arctic) are a necessary first step in addressing deficiencies in ocean planning.
- BOEMRE should heed recommendations in the Pew Environmental Group November 10, 2010 study “Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unexamined Risks, Unacceptable Consequences.”
- Arctic National Wildlife Refuge should be permanently protected.
- BOEMRE’s NEPA processes should follow guidelines set out in the 2011 Expert Review Panel report on how to properly construct and report mitigation data.
- If significant impacts may result from the proposed action, it is essential that the SEIS disclose how mitigation measures will be carried out and enforced so that oil and gas companies can abide by them in the future.
- BOEMRE needs to provide specific mitigation measures that address the cumulative threat to bowheads from increased shipping, pollution and noise.
- Air and water permits for recent exploration plans have contemplated significant air, water, and noise pollution. In ensuring the use of “best available and safest technology,” BOEMRE should consider technologies undertaken elsewhere in the Arctic.
- BOEMRE should work with Alaska Native co-management committees to avoid impacts to marine mammals and ensure their availability to subsistence users. Also, MMPA requirements should be incorporated in BOEMRE’s NEPA review.
- BOEMRE should ensure “best available technology in the OCS, including zero discharge technology.” As Shell has agreed to this standard for activities in Camden Bay, BOEMRE should apply same standard in Chukchi.
- To avoid impacts to the beluga hunt, vessels should not transit in the Chukchi Sea until July 5 or the end of the beluga hunt, whichever occurs later. Another comment suggested there should be no industrial activity in the Chukchi until July 15 or until the beluga hunt has occurred.
- There should be more mitigation for the bowhead whales that migrate through the lease sale area in the fall.
- There must be a 60-mile buffer zone.
- There must be stipulations requiring vessels to use ultra low sulfur fuels.
- There should not be more than one drilling operation at any time (in the Chukchi Sea).
- A zero discharge standard should be applied to drilling. Mud tailings should not be discharged into our ocean.
- Mitigation measures need to be in place to ensure that walrus are not disturbed due to aircraft or helicopter traffic.

- Mitigation measures ensuring that walrus don't stampede should be developed and incorporated.
- Mitigation measures to avoid bird strikes should be developed and incorporated. Vessels should use appropriate lighting to protect birds from collisions.
- As several communities now hunt for bowhead whales in the fall, there should be a fall shutdown of oil and gas activities to avoid disturbing subsistence activities.
- BOEMRE should require industry to provide its environmental data available to the public. This would improve conversations regarding the relative success of mitigation measures.
- The SEIS must include specific mitigation measures to protect subsistence, i.e. mandatory CAA and/or lease sale stipulations. Also, there should be a lease sale stipulation requiring an oil spill mitigation agreement that would provide immediate access to alternative hunting opportunities in the event of a spill.
- The government should consider having homes ready for displaced people, in case there is a very large oil spill.
- BOEMRE needs to establish specific requirements to allow for prompt recovery action in the event of a VLOS. It must also ensure adequate containment of a spill and require a same-season relief well (or cessation of drilling should a same season relief well becomes infeasible) to promote quick recovery and reduce risks to the spring lead system.
- There would need to be a strong commitment to funding and increasing the capacity of the Federal government to effectively manage Arctic OCS development. Congress needs to fully fund federal agencies (including the USCG and NOAA) so they can function as partners in preventing and responding to any incidents.
- Alaska Natives who may be affected by development should be provided employment opportunities to help mitigate disruptions to their subsistence culture.
- Companies exploring in the Arctic should hire Alaskans, because Alaskans have a stake in protecting the Alaskan environment.
- The Iñupiat people should be trained for high level jobs in the oil industry (e.g., ship captain), so we can ensure for our people that things are done correctly.
- Each village is different, and relies on different resources. If there is development, each affected village should have authority to regulate and manage their own resources, to protect their particular harvest.

Several comments suggested mitigation specific to a particular area, such as Hanna Shoal:

- Important ecological areas such as Hanna Shoal should be protected from degradation. Protections should also encompass those areas where activities would affect the ecosystem.
- Areas that are especially important to wildlife or subsistence harvesting, including the 60-mile corridor and Hanna Shoal, should be better protected.
- Hanna Shoal possesses unique characteristics, such as greater persistence of ice flows in summer months, that argue for its exclusion from the lease sale.
- BOEMRE should perform a site-specific EIS for any proposed exploration drilling. These EISs should include trajectory models and analysis of potential blowouts.

Source of Comments

- Tribal governments and Alaska Native Organizations
- Local Governments

- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

The lease stipulations and other mitigation measures discussed in the Sale 193 FEIS are incorporated in the SEIS by reference. BOEMRE finds these mitigation measures sufficient and did not identify any necessary new mitigation measures during this supplemental process. Proposed mitigations concerning later stages of the OCSLA process will be taken under advisement. Responses to issues out of the scope of the present analysis are provided to the extent practicable below.

Current Regulations and Potential Effects. Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Aspects of gas development and production that may affect the human environment include: the presence of infrastructure (offshore platform, offshore and onshore pipelines, and shore base); noise and other disturbance from development activities; vessel, air, and ground transportation; emissions and discharges; and accidental events.

As discussed in the SEIS, these aspects of natural gas development and production are expected to be highly similar to, or simply a continuation of, the equivalent aspects of oil development and production. There are many similarities between the potential impacts of natural gas development and production analyzed in the SEIS and the potential impacts of oil development and production analyzed in the Sale 193 FEIS. This is due to the similarity of activities that would occur under each scenario. For instance, there is little difference in potential impacts between installing an oil pipeline and installing a parallel gas pipeline within the same corridor, whether offshore or onshore. This is not to say that impacts would be identical; the SEIS carefully notes several instances where potential impacts would vary.

Regulatory Safeguards. BOEMRE would review specific exploration and development and production plans while considering whether to approve any drilling. This allows BOEMRE to respond to new information and put additional requirements in place before any new drilling occurs in the Alaska OCS. Lessons learned from the *Deepwater Horizon* event have led to requirements that will take effect before drilling occurs, as described in Section IV.D.1 under the subheading Rule Changes Following the *Deepwater Horizon* Event. Operators are required to comply with the Increased Safety Measures for Energy Development on the Outer Continental Shelf rulemaking (75 FR 63346 [2010-10-14]). Also, BOEMRE issued NTL No. 2010-N06, which requires operators to do the following: provide a scenario for the potential blowout of the proposed well expected to have the highest volume of liquid hydrocarbons, and also describe the measures they propose that would enhance the ability to prevent a blowout, reduce the likelihood of a blowout, and conduct effective and early intervention in the event of a blowout. The latter will include arrangements for drilling relief wells and any other measures the operators propose. As described in NTL No. 2010-N10, BOEMRE is evaluating whether each operator has provided adequate information in its current Oil Spill Response Plan describing the types and quantities of subsurface and surface containment equipment the operator can access in the event of a spill or threat of a spill, and the deployment time of each.

Ice and Weather. BOEMRE will give due consideration to ice conditions and safety conditions of any proposals for exploration or development and production. OCS operating regulations require operators to develop and submit a Critical Operations and Curtailment Procedure (COCP) with an exploration or development and production plan. The COCP addresses the methods by which an operator will cease, limit, or not initiate specific critical operations because of environmental

conditions that may be encountered at the site. The most probable factors that could result in the curtailment of critical operations in the Arctic OCS are heavy weather, sea ice, and structural icing. Before any plan approval, BOEMRE conducts a thorough technical review of the COCP.

TAR - Technology Assessment and Research Program. BOEMRE's Technology Assessment and Research (TAR) Program supports research associated with operational safety and pollution prevention as well as oil spill response and cleanup capabilities. The TAR Program was established in the 1970's to ensure that industry operations on the Outer Continental Shelf incorporated the use of the Best Available and Safest Technologies, which were subsequently required through the 1978 OCS Lands Act amendments and Energy Policy Act of 2005. Information on Oil Spill Response Research can be found at: <http://www.boemre.gov/tarprojectcategories/MasterListofOSRRProjects.htm>.

OSRR - Oil Spill Response Research Program. BOEMRE is the principal Federal agency that funds oil spill response research (through the Oil Spill Response Research [OSRR] Program). For more than 25 years, the Bureau has maintained a comprehensive, long-term research program to improve oil spill response technologies. The major focus of the program is to improve the knowledge and technologies used for detection, containment, and cleanup of oil spills that may occur on the U. S. Outer Continental Shelf.

The BOEMRE OSRR program is an openly-cooperative effort bringing together funding and expertise from research partners in government agencies, industry, and the international community for the sole purpose of participating in research and development (R&D) projects. Many of these projects are Joint Industry Projects, where the Bureau partners with other stakeholders to maximize research dollars. The Bureau has cooperated in the exchange of technological information with Canada, France, Germany, Japan, Norway, and the United Kingdom through informal contacts, workshops, and technical meetings such as the International Oil Spill Conference. Most procurements of R&D projects are competitive.

Funds for the OSRR program and operation of Ohmsett (the National Oil Spill Response Test Facility) are appropriated from the Oil Spill Liability Trust Fund (OSLTF). The OSLTF received funds from a \$0.05 tax on each barrel of oil produced or imported into or exported out of the United States. This tax was suspended when the fund reached \$1 billion dollars. Currently, funds for the OSLTF are derived from interest on the fund, cost recovery from responsible parties, and penalties. The tax can be re-implemented if the fund falls below the one billion dollar level. As intended by the Oil Pollution Act of 1990, potential polluters (companies that produce and transport oil) are supporting research to improve oil spill response capabilities.

The current OSRR projects cover a wide spectrum of oil spill response issues and include laboratory, meso-scale, and full-scale field experiments. Major topic areas include the following:

- Remote sensing and detection
- Physical and chemical properties of crude oil
- Mechanical containment and recovery
- Chemical treating agents and dispersants
- In situ burning
- Deepwater operations
- Operation of Ohmsett – The National Oil Spill Response Test Facility

Protection of Subsistence. Mitigation measures concerning subsistence are brought forward from the Sale 193 FEIS and considered in the SEIS. Regulatory authority over MMPA standards concerning impacts to subsistence belongs to NMFS and FWS. That said, BOEMRE does not authorize any activities that violate applicable law, to include MMPA provisions protecting subsistence. If BOEMRE inspectors were to observe apparent violations of the MMPA, BOEMRE

would report these circumstances to NMFS. Though not responsible for managing subsistence resources, BOEMRE is amenable to working with Alaska Native co-management committees to further avoid impacts to marine mammals and ensure their availability to subsistence users.

Open Water Season Conflict. Regarding Open Water Season Conflict Avoidance Agreements, current operating regulations require mitigation of multiple-use conflicts. The regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. The regulations at 30 CFR 250.252(b) and 30 CFR 250.254 require lease owners/operators to describe in their development plans how they will mitigate the potential for incidental takes to occur, monitor for potential takes, and report takes if they occur. The regulations at 30 CFR 250.261 require lease owners/operators to provide information in their development plans on how they will conduct their proposed activities in a manner consistent with the provisions of the MMPA and ESA.

BOEMRE cannot require agreements between third parties; however, nothing in the OCS operating regulations prevents operators from entering into a conflict avoidance agreement. Conflict Avoidance Agreements are third party agreements and failure of any party to meet the provisions will not be enforceable by the Federal government.

Relief Funding. Section 384 of the Energy Policy Act of 2005 (Public Law 109-58) established the Coastal Impact Assistance Program (CIAP) and authorized funds to be distributed to OCS oil and gas producing states to mitigate the impacts of OCS oil and gas activities. Currently, BOEMRE administers the Program; however, beginning on October 1, 2011, the program will be administered by the FWS.

Under the CIAP, the Secretary of the Interior is authorized to distribute to producing states and coastal political subdivisions \$250 million for each of the Federal fiscal years (FY) 2007 through 2010. This money is allocated to each producing state (Alabama, Alaska, California, Louisiana, Mississippi, and Texas) and coastal political subdivision based upon allocation formulas prescribed by the Act.

The Act required a minimum annual allocation of 1 percent to each state. For FY 2007 and FY 2008, Alaska received the minimum 1 percent allocation of \$2,425,000 for each funding allocation year. Because of the increase in Alaska OCS oil and gas revenues resulting from the Chukchi Sea Lease Sale 193, Alaska FY 2009 and FY 2010 allocation increased to 15.45% of total CIAP funds available for a distribution of \$37,471,876.48 for each allocation year.

On November 13, 2009, BOEMRE notified the State of Alaska that their allocation for FY 2010 was reduced by 1% to cover BOEMRE administrative costs, reducing the overall total of CIAP funds to Alaska to \$79,407,444.96.

Revenue Sharing. Mechanisms for revenue sharing could only be established through an act of Congress.

Coal. BOEMRE has applied stringent safeguards relevant to OCS oil and gas development and is not aware of any further safeguards that it should incorporate from federal coal permitting standards.

Inspectors. BOEMRE inspectors are highly knowledgeable about the offshore operations they inspect. In the Alaska Region, inspectors receive training (typically in the form of videos or PowerPoint presentations developed with input from BOEMRE subsistence and cultural resource analysts) on subsistence activities and cultural values of the North Slope communities. As BOEMRE implements new requirements for inspector training, the suggestion to include sociocultural expertise in the inspection team has been specifically identified for managerial consideration.

Accountability and Transparency. BOEMRE posts statistical information on Potential Incidents of Non-Compliance and reports Incidents of Non-Compliance on the BOEMRE website. Various reports, Environmental Studies, NEPA documents, overview of OCS programs, and notices of current events are also posted to the website. BOEMRE is continually working to make the website more user-friendly and the information more accessible and usable.

Interagency Planning. In compliance with the President's goals and objectives, both USDOJ and BOEMRE are participating in the interagency Coastal and Marine Spatial Planning work group. The work group is investigating and developing ways to better utilize information from multiple agencies. As BOEMRE gets better information through these efforts, we will use this new information in the evaluation of potential environmental effects for proposed exploration and development/production plans. At this time, BOEMRE is unaware of any information available through this process that we have not already considered in the Lease Sale 193 analyses.

PEW Report. BOEMRE has reviewed the Pew Environmental Group November 10, 2010 study "Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unexamined Risks, Unacceptable Consequences" and took this information into consideration while developing the VLOS analysis .

ANWR. Operations in the Chukchi Sea OCS and related onshore support activities are not expected to have any effects on ANWR.

Incidental Take Authorizations. The referenced report recommends monitoring requirements for Incidental Take Authorizations. The expert agencies charged with administering the incidental take provisions of the MMPA are NMFS and FWS. These issues are outside the scope of the SEIS.

Significant Impacts from natural gas development. The mitigation measures developed and analyzed in the Sale 193 FEIS are carried forward and analyzed within the Final SEIS.

Shipping. BOEMRE would analyze each specific proposal for oil and gas activities on the Alaska OCS at the time they are submitted, and provide any appropriate mitigation measures at that time.

Bowhead Migration. BOEMRE is aware that the majority of the Western Arctic bowhead whale population migrates westerly through or adjacent to the Lease Sale 193 area in the fall of each year. It is well established that bowhead whales may display avoidance or adjust migratory travel routes around oil and natural gas related seismic surveys, vessel traffic, drilling, and production activities. We have thoroughly reviewed the literature and have found no indication of measureable population level or individual level effects upon bowhead whales resulting from the added stress or energy expenditure required by alterations in migration path performed through the fall migration within the U.S. Beaufort and Chukchi Seas. Mitigation measures have been developed and are implemented as a result of recognized potential effects using practical application of science, traditional knowledge and common sense approaches to minimize potential effects to bowheads. BOEMRE will further analyze specific proposals for exploration, development and production plans as these become available and formulate further mitigation measures as new science, technology, and traditional knowledge indicate.

BOEMRE is committed to protecting subsistence activities. In response to comments, BOEMRE Alaska OCS Region has clarified its NEPA significance threshold for subsistence to better reflect its policy of protecting subsistence (see Issue 13 and Final SEIS Section IV.A.1). This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities for several decades. The predominate attribute of this regulatory policy makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest of resource can be minimized in such a manner that the disruption is short term and as a result of incidental or accidental encounters.

Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and the BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233).

Under the proposed action, these encounters will come primarily from vessel traffic and aircraft traffic associated with the project. Every proposed action that will tier from the Sale 193 FEIS or Final SEIS involving seismic, exploration or development will require a separate NEPA analysis to identify environmental effects, including those on the human environment.

Best Technology. BOEMRE has devoted considerable effort over the past year to putting in place a new—and necessary—set of rigorous standards for safety and responsibility in our offshore development program. Our aggressive reforms to offshore oil and gas regulation and oversight are the most extensive in U.S. history. Please refer to Section IV.D.1 in the Final SEIS.

On January 19, 2011, the Secretary of the Interior and the Director of BOEMRE announced the formation of the Ocean Energy Safety Advisory Committee (OESC). The OESC is a 15 member public federal advisory body composed of the nation's leading scientific, engineering and technical experts. The OESC is comprised of representatives from federal agencies—including BOEMRE, the Department of Energy, the National Ocean and Atmospheric Administration, the United States Geological Survey, the Environmental Protection Agency, and the United States Coast Guard—as well as the offshore oil and gas industry, academic institutions, and other non-governmental organizations. The group advises the Secretary, through the BOEMRE Director, on matters and actions relating to offshore energy safety, including drilling and workplace safety, blowout containment and spill response. The OESC will be a center of excellence charged with driving research and development and technical innovation across government and industry in the areas of drilling safety, well control and subsea containment, and oil spill response. The OESC is the first step toward establishing the proposed Ocean Energy Safety Institute, which would facilitate collaborative research and development, training and execution in these and other areas relating to offshore energy safety going forward. The OESC will provide advice on how best to stand up the Institute, and on what role OESC should play in the Institute. Further information about OESC is at: <http://www.boemre.gov/mmab/EnergySafety.htm>.

Ultra Low Sulfur Fuel. Air quality permitting is the responsibility of the USEPA, which would review proposals for activities on the OCS on a case-by-case basis. It is worth noting that two recent air quality operating permits for proposed activities in the Beaufort Sea are predicated on the use of ultra low sulfur diesel.

National Commission Report on DWH event. On January 11, 2011, the National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore (Commission) issued its final report. Prior to the Commission's report, BOEMRE had been working to address many of the issues identified by the Commission. BOEMRE has undertaken the most aggressive and comprehensive reform of offshore oil and gas regulation and oversight in U.S. history. This includes the development and implementation of heightened standards for drilling practices, safety equipment, and environmental safeguards. These new rules set forth prescriptive standards that industry must meet. Further, for the first time in the U.S. offshore regulatory system, performance-based standards focused on the identification and mitigation of specific risks associated with offshore operations. These changes are substantial, and substantial work is being done to ensure that these changes are both lasting and effective. The ultimate goal is to establish an industry-wide culture of safety, and to have well-equipped and professional regulators. Both elements are necessary to keep pace with the challenges

and risks of offshore drilling, particularly as those operations push into new frontiers and face increased technical challenges. As we continue moving forward, we will continue to take into account the Commission's recommendations.

For more information on the status of BOEMRE regulatory and structure reforms please refer: "BOEMRE Director Discuss Future of Offshore Oil and Gas Development in the U.S. at Gulf Oil Spill Series" for a synopsis of reforms being established in BOEMRE at <http://www.boemre.gov/ooc/press/2011/press0419.htm>; and BOEMRE Director Delivers Remarks at World National Oil Companies Congress (*Meets with Officials to Discuss Offshore Safety and Regulatory Issues*) at <http://www.boemre.gov/ooc/press/2011/press0622.htm>.

Full Funding. Comments on agency funding are beyond the scope of the SEIS. The scope of this SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193.

Continued Environmental Stewardship. BOEMRE has oversight responsibility from the beginning to the end of oil and gas activities within the OCS. This oversight responsibility means BOEMRE enforces statutory and regulatory provisions on a company from the initial applications for oil and gas activities until the company concludes oil and gas activities, including the decommissioning of offshore oil and gas facilities and pipelines.

60 Mile Buffer. The commenter reference to a 60-mile buffer zone is relative to Alternative III described in the Revised Draft SEIS. BOEMRE includes this Alternative in the Final SEIS. The Secretary of the Interior will make a decision based on the alternatives in the Final SEIS.

Multiple Drilling Operations. If the Secretary of the Interior reaffirms any part of the lease sale decision, the leases that were issued would still have the mitigation measures. BOEMRE placed seven stipulations as a condition to the leases (Stipulation 1, Protection of Biological Resources; Stipulation 2, Orientation Program; Stipulation 3, Transportation of Hydrocarbons; Stipulation 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources; Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence-Harvesting Activities; Stipulation 6, Pre-Booming Requirements for Fuel Transfers; and Stipulation 7, Measures to Minimize Effects of Spectacled and Steller's Eiders During Exploration Activities.)

BOEMRE conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

Relocation in the Event of a Spill. BOEMRE understands the concern regarding potentially devastating effects of a catastrophic oil spill. BOEMRE response is limited because the agency is not in a position to respond to comments on the potential relocation of communities in the event of a very large oil spill.

The intent of this Final SEIS is to inform the decision maker (the Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193. No decision on drilling will be made during this SEIS process. Exploration activities in the Chukchi Sea are solely dependent on the Secretary's decision on the lease sale and if that decision results in leases.

Blackout Dates for Beluga Hunt. If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have stipulations in place to address concerns about the transit of vessels during the beluga subsistence hunt. Specifically, Stipulation 1, Protection of Biological Resources and Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine

Mammal Subsistence-Harvesting Activities were written to ensure that activities do not cause undue harm to the subsistence hunt, including the subsistence hunt on beluga whales.

Additionally, BOEMRE conducts extensive regulatory, technical, and environmental reviews of all energy exploration, development, production, shutdown and abandonment operations concerning each OCS lease. The agency has authority and ability to impose additional conditions and requirements for such lease operations if there are conflicts with subsistence.

Measures to Protect Walrus. If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources in place to protect walrus.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

Vessel Lighting. If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources, and Stipulation 7, Measures to Minimize Effects to Spectacled and Steller's Eiders During Exploration Activities, in place to protect birds during operations.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

Fall Shutdown for Bowhead Hunt. If the Secretary of the Interior reaffirms any part of the lease sale decision, BOEMRE will have Stipulation 1, Protection of Biological Resources, and Stipulation 5, Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvesting Activities, in place to protect the bowhead hunt.

BOEMRE also conducts intensive regulatory, technical, and environmental review of all OCS activities on a lease, and has the ability to impose additional conditions and requirements for operations based on these reviews of that specific OCS activity.

Release of Corporate Information. When BOEMRE requires the monitoring of environmental resources because of oil and gas activities, that information will be available to the public barring any Federal law that prohibits the release of certain types of related information.

Regulation of Subsistence Resources. BOEMRE does not have jurisdiction over managing and regulating the subsistence harvest resources. The Federal agencies with authority are the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (walrus and polar bear).

Distribution of Documents. Additional information about BOEMRE's efforts to distribute the Draft SEIS and Revised Draft SEIS is provided in Issue Category 2.

Funding Local Participation in NEPA Processes. The purpose of the Final SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed decision as to whether to reaffirm, modify, or cancel Lease Sale 193. Therefore, BOEMRE's response to comments regarding tribal and regional government funding is limited.

BOEMRE is open to discussing this issue at future government-to-government consultations with tribal leaders.

Analysis of Exploration Plans. BOEMRE strives to conduct its environmental review of proposed Exploration Plans within the 30-day time period prescribed by the OCSLA. BOEMRE Alaska Region typically conducts these reviews via site- and project-specific Environmental Assessments that tier from lease sale EISs. Should such an environmental assessment find that previously

unanalyzed significant adverse effects would occur as a result of proposed exploration activities, BOEMRE could require a modification of the exploration plan or commence preparation of an EIS.

Issue 6. Global climate change challenges.

Summary of Comments

Various comments referred to global climate change and the challenges presented by a warming Arctic. Several comments noted that the effects of climate change are already beginning. For instance, they suggested there was a noticeable lack of sea ice this fall and ocean acidification (connected with climate change) has been documented. Many comments made general reference to an Arctic already weakened and fragile due to warming climate, implying that animal populations will be more sensitive. Some specific suggestions or criticisms included:

- The SEIS should incorporate two additional concepts into its cumulative effects analysis: the interaction of climate change and industrial activity, and the contribution of natural gas development to black carbon emissions.
- The cumulative effects analysis in the SEIS (and in the Sale 193 FEIS before it) is flawed because it analyzes the proposed action against a static baseline and ignores likely changes in the Arctic climate and environment. These documents should analyze effects to Arctic species (including marine mammals, polar bears, walrus, terrestrial mammals, and birds) while accounting for factors like diminished habitat, food resources, or population levels, and increased competition from species expanding their ranges into the Arctic.
- BOEMRE should analyze contributions to climate change from increased natural gas and oil consumption resulting from the proposed action.
- Climate change and the shrinking polar ice caps will affect weather and sea ice patterns and open new shipping lanes, complicating migratory and feeding patterns of marine and sea bird life across the action area.
- The SEIS fails to address how increasingly dynamic ice conditions may affect operations via pileups, pressure ridging, ice movements, ice gouging, strudel scouring, etc.
- The SEIS should address potential cumulative effects associated with ocean acidification.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

BOEMRE shares concerns regarding Arctic warming and the many unique challenges operating in the Arctic. The effects of climate change, including reduced sea ice and increased shipping, are analyzed in the Cumulative Effects chapters of both the Sale 193 FEIS and the Final SEIS. In light of heightened interest and concerns regarding Arctic warming, BOEMRE analysts reviewed the most current information on sea-ice extent and updated the Final SEIS to reflect these changes.

Analysis in the SEIS. As stated in Section V.A.1. of the Final SEIS, BOEMRE analysts "...also considered Arctic warming, which could contribute to cumulative effects through, among other things:

- increased noise and disturbance related to increased shipping;

- decreases in ice cover with the potential for resultant changes in prey-species concentrations and distribution with related changes in species distributions;
- changes in subsistence-hunting practices; and
- northern expansion of species.”

These themes were considered in BOEMRE’s evaluation of potential cumulative effects for each resource area. Specific language is provided in the document wherever potential impacts are reasonably foreseeable. For example:

- Section IV.C.2 of the SEIS contains analysis of potential air quality impacts associated with natural gas development. This analysis references a variety of potential emissions and notes that best available control technology (BACT) would be required for any project that would need an EPA or ADEC (Alaska Department of Environmental Conservation) air permit. Meanwhile, Section V.B.2 addresses “Arctic haze resulting from elevated concentrations of fine particulate matter” mostly attributable to “combustion sources in Europe and Asia.” Additional text referencing the possibility that natural gas development activities could potentially contribute to black carbon levels in the region—and, therefore, contribute to Arctic warming—has been inserted into the Final SEIS.
- Section V.B.6., which analyzes potential cumulative impacts to threatened and endangered species, explains how “the ice-associated bowhead may be particularly susceptible to any diminishment or variation in sea ice cover associated with climate change. Potential impacts may result from an increase in vessel traffic, an increase in killer whale predation, changes to hunting dynamics, and other factors.”
- Section V.B.6., here addressing potential cumulative impacts to polar bears, lists climate change as a “main impacting factor of concern to polar bears”. The analysis goes on to state that “[I]eads and polynas are critical habitat for polar bears, especially during the winter and spring, and increasing shipping traffic could disturb polar bears during these critical times. Changes in the extent and concentration of sea ice may alter the distributions, ranges, nutritional status, reproductive success, and ultimately the abundance and stock structure of polar bears.”
- Section V.B.8., analyzes potential cumulative effects to other marine mammals and states: “For marine mammals adapted to life with sea ice, the effects of reductions in sea ice are likely to be reflected initially by shifts in range and abundance (Tynan and DeMaster, 1997), particularly for seals, gray whales, and walrus. Changes in the extent and concentration of sea ice may alter the seasonal distributions, geographic ranges, patterns of migration, nutritional status, reproductive success, and ultimately the abundance and stock structure of some species.”
- Sections V.B.7 and V.B.9., which address potential cumulative effects to marine and coastal birds and to terrestrial mammals, respectively, both note that environmental changes associated with Arctic climate change have the potential to affect these resources to varying degrees.

Avoiding Speculation. BOEMRE’s cumulative analysis of natural gas development impacts accounts for all reasonably foreseeable changes to background conditions, including several changes associated with climate change (see discussion of Arctic warming components, above). While potential impacts associated with climate change in the Arctic are of grave concern, it is often difficult to quantify additive and synergistic impacts from activities that may occur several decades from the present time. To ensure that the decision maker is cognizant of these concerns, however, new text regarding potential adverse impacts on Arctic species that could occur due to Arctic warming (including consideration of depleted population levels and/or increased sensitivity of Arctic

species) was incorporated into the Final SEIS. Additional analysis has also been added to address potential cumulative impacts associated with ocean acidification. Of course, if a proposal for natural gas development and production does emerge several decades from now, BOEMRE would undertake an obligatory review of required exploration and development plans based on the most current environmental information and specific project details. BOEMRE will also continue to work with NMFS and FWS to stay current on issues which may affect protected species.

Black Carbon. Additional clarification and analysis regarding potential black carbon emissions and impacts has been incorporated into the Final SEIS.

Impacts from GHG Emissions from Natural Gas. Impacts of greenhouse gas emissions from the consumption of additional natural gas was considered for analysis, but was not analyzed in this SEIS process. A full explanation of this decision is provided in Section II.C.3.

Ocean Acidification. BOEMRE has incorporated additional information on ocean acidification into several portions of the Final SEIS. This includes background information on the nature of the ocean acidification issue; the addition of an ocean acidification component to the Arctic warming scenario in the cumulative effects analysis; and environmental effects analyses where appropriate.

Hanna Shoal. The importance of Hanna Shoal to various environmental resources is identified and analyzed in numerous portions of the Sale 193 FEIS and the Final SEIS. Hanna Shoal was not specifically excluded from Lease Sale 193 and no new information or additional analysis in this Final SEIS suggested altering that decision.

Issue 7. Including all relevant and available information

Summary of Comments

Many comments identify studies or specific pieces of information that should be analyzed in the SEIS. The following is a list of identified information:

- All of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska.
- Additional information published subsequent to the release of the Final EIS.
- A July 2010 Alaska Department of Fish & Game Study of bowhead whale migratory patterns in the Chukchi Sea. Some comments called for new information from this study to be incorporated into the SEIS, while others stated that new information requires a new NEPA document considering alternatives based on the extensive use of the lease sale area by bowhead whales during fall migration.
- Recent walrus tagging data from the USGS.
- The NMFS 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas.
- Information from the President's Spill Commission.
- The recent USGS study that will provide additional information on Arctic science, including issues pertinent to potential oil and gas exploration and development activities.
- Forthcoming information from the Native Village of Kotzebue's 6-year study of ice seals and their habitat.
- Knowledge of which specific areas have been leased, which would make it more feasible to fill information gaps for this lease sale.
- Traditional knowledge that will enable BOEMRE to fill some of the data gaps in the 193 FEIS and SEIS.

- The new circumstances and information pertaining to oil spills and blowouts from the Gulf of Mexico, which raise substantial questions about the efficacy of BOEMRE's prior analyses of oil spills in the OCS and require review in the SEIS.
- It should be noted in Section I.F.3 that State of Alaska standards/regulations come into play when OCS pipelines tie into on-shore facilities, pump stations, or pipelines.
- The SEIS should include BOEMRE's own COMIDA (Chukchi Offshore Monitoring in Drilling Area) effort.
- Section IV.E.2 should note that the NPDES Arctic General Permit for Oil and Gas Exploration is undergoing renewal and in the future there will be separate permits for the Chukchi and Beaufort Seas.
- Appendix D, page 1 should include information on NTL No. 2010-N06, which requires an application for permit to drill (APD) to contain information on availability of a rig to drill a relief well and rig package constraints. Also note that this NTL requires applicants to specify as accurately as possible the time it would take to contract for a rig, move it onsite, and drill a relief well.
- Section IV.D.1 discusses regulatory changes that followed the DWH event, but does not discuss the anticipated safety impacts of these regulatory changes and the consequent decrease in the probability of a VLOS. Providing this information would provide a more accurate prediction of likelihood of a VLOS to the public.
- There are many new studies and data collection efforts currently underway that would be helpful to the Natural Resource Damage Assessment process.
- None of the information that scientists have collected in the past five years under the Annual Studies plan was found to be relevant to the analysis in the SEIS. This is a blatant disregard of science and a waste of taxpayer's money.
- The SEIS should include more LTK (Local Traditional Knowledge) in order to understand the delicate nature of local resources in conjunction with traditional scientific research. This would let the agency synthesize static research with human observation, and would result in better info and more informed decisions.

Several comments stated that once BOEMRE collects additional information and collaborates with other agencies such as USGS and NOAA, it should then undertake a comprehensive, coordinated, and integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.

Similarly, one comment suggested that several NGOs are working with a group of scientists to review the USGS report (addressed in Issue Category 36) and to identify priorities for research and monitoring. The contention made was that these efforts will be relevant to the Lease Sale 193 decision.

One comment made the general point that the Draft SEIS is dated September 2010, only a few weeks after the District Court's decision, so it appears that little new analysis was performed by BOEMRE despite the Court's mandate.

Source of Comments

- Tribal governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

The environmental analysis in the Sale 193 FEIS is based on comprehensive review of a variety of relevant scientific studies and includes information collected from the Environmental Studies Program (ESP) in Alaska. In developing this SEIS, BOEMRE analysts again reviewed all relevant and related ESP information and also considered new information (i.e., published subsequent to the Sale 193 FEIS) relevant to understanding the potential environmental impacts of the natural gas development and production scenario. This information is specifically identified and utilized in various portions of the Final SEIS. Where, for a particular resource area, no new information was identified as relevant to an understanding of potential impacts, language to this effect was added in the text. In preparing the Final SEIS, BOEMRE analysts also reviewed a “[I]list of recent studies that should be considered in the SEIS,” as submitted in a notable comment. This list contained over one hundred studies covering a variety of topics. In some cases, BOEMRE analysts found this information useful in more fully describing the affected environment or potential impacts, or in supporting the analysis with more recent information. These studies are now referenced in the SEIS, and they included the following resource areas: lower trophic organisms, fish resources, Threatened and Endangered marine mammals, other marine mammals, and subsistence-harvest patterns. Explanatory text was added to the Final SEIS, where appropriate. Most references provided by the public comment, however, failed to provide new and relevant information; these studies were reviewed but are not referenced. None of the listed studies controvert the conclusions of the Final SEIS.

Additionally, it was not necessary to evaluate “new” information (again used here to mean information published subsequent to the Sale 193 FEIS) in the 1502.22 analysis. The analysis in Appendix A was completed to determine whether missing information identified by BOEMRE in the Sale 193 FEIS was essential or relevant under 40 CFR 1502.22 to BOEMRE’s analysis, and whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. As demonstrated in Appendix A, BOEMRE was not missing any information that was essential to a reasoned choice amongst the alternatives at the time of Lease Sale 193 (February 2008).

Regulating Pipelines. Additional language regarding the role of state standards and regulations concerning pipelines has been added to the Final SEIS.

Traditional Knowledge. BOEMRE holds a deep respect for the accumulated wisdom and insight offered by traditional knowledge, and makes affirmative efforts to incorporate traditional knowledge into NEPA documents. The BOEMRE Environmental Studies Program has developed studies that will gather additional traditional knowledge resources for use in future NEPA documents.

US Geological Survey (USGS) Report. A comprehensive response to comments regarding the recent USGS report is provided within Issue Category 36.

Deepwater Horizon Event. Information from the *Deepwater Horizon* event and its implications are discussed in greater detail within Section IV.D.1 and Appendix D of the Final SEIS.

NTL No. 2010-N06. Information concerning this Notice to Lessees is provided in the body of the document, within Section IV.D.1. NTL No. 2010-N06 is also referenced in Section IV.D.2.

NPDES. The current Arctic National Pollutant Discharge Elimination System (NPDES) General Permit for wastewater discharges from Arctic oil and gas exploration expired on June 26, 2011. EPA will reissue separate NPDES exploration General Permits for the Beaufort Sea and the Chukchi Sea prior to the 2012 drilling season. EPA expects that tribal consultation and public comment on the new proposed Arctic oil and gas exploration permits would occur in the Fall 2011.

COMIDA. The COMIDA effort at BOEMRE has gathered information on several environmental resource areas, including benthic organisms, whales, and social issues. Data from the COMIDA

programs is shared publicly (via the agency’s website, public presentations, etc.) and is made available to BOEMRE analysts for use in environmental impacts analyses. As a supplemental document, the Final SEIS references new information useful to understanding the environmental impacts of natural gas development and production. Where no new information alters the conclusion of the Sale 193 FEIS or sheds light on the specific impacts of natural gas development and production, no new information need be cited. Lack of a specific citation does not indicate that data was not considered.

Priorities for Research and Monitoring. In preparing this Final SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the Final SEIS analysis. BOEMRE analysts examined the USGS report for new information relevant to understanding the potential environmental impacts of each lease sale alternative. Many of the data gaps expressed in the USGS Report were identical or substantially similar to those already addressed as part of the SEIS process. In other instances—as appropriately noted by USGS—there exist information gaps that should be addressed before future planning of development and production activities on the OCS, but do not need to be addressed at the leasing and exploration stage of the OCS oil and gas process. The OCS Lands Act provides for a four-stage process for oil and gas development. This four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” (*Sierra Club v. Morton*, 510 F.2d 813, 828 [5th Cir. 1975]). BOEMRE uses best-available scientific information. The BOEMRE does not “defer” gathering of information to later stages of OCS activities. Rather, BOEMRE analyzes more and more specific information at each stage of OCS activities as the location, time, and intensity of the activities are better understood. When subsequent scientific information becomes available, BOEMRE will consider that information in its decision making process.

Issue 8. Not enough information for adequate analysis.

Summary of Comments

Many comments expressed opinions as to whether enough information exists to support an adequate analysis. Comments asserting the negative addressed one or more of the following themes:

- The Arctic Ocean is one of the least studied and poorly understood ecosystems in the world.
- There remains a widespread lack of critical baseline environmental information—information that is essential and relevant to the decisions which the agency is charged with making at this lease sale phase.
- There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, fish, and lower trophic organisms.
- There should be longer-term studies that provide an understanding of the variability of species over time.
- There needs to be a comprehensive research and monitoring program that would provide a fundamental understanding of the marine ecosystem—it should include guidance and input from local communities.

- At this point in time, there are biological, ecological, weather, oceanographic, and climate change data and considerations that have not been sufficiently addressed and analyzed in order to make responsible decisions on oil and gas exploration and development in the Beaufort and Chukchi Seas.
- Additional information is required to identify important ecological areas within the lease sale area. To avoid harm to ecosystem health, this information must be gathered prior to a decision on leasing.
- Further studies are needed to delineate the importance of Hanna Shoal and surrounding areas to the health of the Chukchi Sea.
- Lack of baseline information makes it difficult to know what impacts from exploration actually occur, may occur, or whether mitigation plans put in place are effective.
- Lack of understanding of ecological processes makes accurate assessment of natural gas development and production, as well as determining what information is essential or relevant, very difficult.
- More baseline scientific research and monitoring is needed to provide an understanding of the Arctic ecosystem before making these decisions.
- A comprehensive, integrated research and monitoring plan is required that defines existing information and research plans.
- The piecemeal approach to science in the BOEMRE Environmental Studies Program Annual Study Plan is inadequate; a more holistic approach to satisfying informational needs is required.
- BOEMRE should develop a comprehensive interagency research plan.
- A new, comprehensive program in the mold of the OCS Environmental Assessment Program (OCSEAP) program should be developed, and this time it should incorporate traditional knowledge
- BOEMRE should work with other agencies, industry, conservation organizations, and other stakeholders to develop standards and seek resources for baseline research and monitoring in areas under consideration for oil and gas development.
- Efforts to gather additional information on the affected environments and communities should include opportunities for communities along the Chukchi Sea to undertake research.
- Additional baseline information is essential if the government is to comply with OCSLA, NEPA, the ESA, and the MMPA.
- The COMIDA studies plan was hastily designed, highly focused on drilling areas started prior to the leasing decision or prior to post-leasing seismic survey, and did not address the comprehensive information needed to provide adequate pre-leasing and post-leasing information that OCSLA requires.

Other comments asserted that enough information does exist to support a decision. These comments introduce the following themes:

- The very substantial existing body of data regarding baseline conditions and the impacts of oil and gas activities in the Chukchi Sea should be acknowledged.
- There exists a large and diverse body of reliable information on Arctic ecosystems that provides significant support for sound scientific judgments.

- Alaska’s North Slope and OCS are very likely the most studied energy basins in the United States. In just that past 10 years, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi seas.
- There will always be project opponents who feel there is not enough data to be deemed sufficient in any analysis.
- Affirming the lease sale is consistent with continuing to collect data.
- The ongoing nature of studies (some of which are likely to continue for decades) does not constrain the agency’s ability to determine that it currently has enough information to make a reasoned choice among alternatives.
- The recently released USGS report indicates that not enough information is known to support oil and gas decisions in the Arctic.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

In conducting its NEPA analyses, BOEMRE utilizes the best available scientific information. A rather large body of information regarding the Chukchi Sea environment has been compiled, especially within the last 35 or so years via the Alaska Region Environmental Studies Program (ESP) and other sources. More description of the ESP and other sources of information is provided below. While additional information regarding the Chukchi Sea ecosystem is certainly desirable, and concerted efforts to collect such information are ongoing, the level of information available today is sufficient to inform this SEIS analysis and any leasing decision.

Sound Science and Ongoing Research. BOEMRE uses sound science in fulfilling its mandate under OCS Lands Act to protect the environment, including Arctic wildlife. Much of the information used in BOEMRE’s NEPA document is derived from studies commissioned by the Alaska Region Environmental Studies Program (ESP). The ESP conducts a systematic and aggressive research program to study and monitor affected environments and communities on the North Slope of Alaska. Details of the program can be accessed from the web portal: www.boemre.gov/alaska/ess/index.htm. Current social research projects involving local residents on the Chukchi Sea coast include “Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska”; “Impact Monitoring for Offshore Subsistence Hunting”; and “Economic Impact Modeling.”

Each autumn the ESP publishes the Alaska Annual Studies Plan, which describes the Region’s ongoing research and studies proposed for the coming year. This document is distributed to approximately 200 organizations, including the Northwest Arctic Borough, the North Slope Borough, the Village of Wainwright, the Native Villages of Point Hope and Point Lay, the Inuvialuit Beluga Whaling Committee, the Maniilaq Association, the Alaska Eskimo Whaling Commission, the Alaska Nanuq Commission, the Eskimo Walrus Commission, and many others. The Annual Studies Plan is accompanied by a call for suggestions of new studies from stakeholders.

Funding New Research. The ESP is not a grant program; studies are most commonly procured through competitive contracting or agreements with other federal agencies. However, BOEMRE’s Coastal Impact Assistance Program (CIAP) provides funding to the State of Alaska and eligible

coastal political subdivisions on a grant basis for projects related to conservation, protection or restoration of coastal areas, and for mitigation of impacts from OCS activities (Table E-1) . For example, the CIAP has recently awarded approximately \$1.8 million to the Northwest Arctic Borough for the collection of local information on subsistence resources.

Table E-1. CIAP allocation to the State of Alaska for the period FY 2007 to FY 2010.

Fiscal Year	Allocation
2007	\$2,425,000.00
2008	\$2,425,000.00
2009	\$37,471,876.48
2010	\$37,471,876.48
Total	\$79,793,752.96

Many ESP studies involve substantial local participation in field work, as well as data analysis and reporting. One example is the study “Pinniped Movements and Foraging: Bearded Seals” conducted by the National Marine Mammal Laboratory. Information about the study, including a detailed list of the contributions by local participants, is at http://kotzebueira.org/current_projects3.html. Native hunters also participate in ESP projects that collect data on bowhead whales and walrus.

The ESP is a very robust program which identifies and obtains information regarding a variety of pertinent environmental issues. Since 1975, over \$300 million in studies of the Alaska OCS area have been commissioned through the ESP alone. Pursuant to 43 U.S.C. 1346 and in anticipation of future NEPA processes, the BOEMRE Alaska OCS Region Environmental Studies Program will continue to fund the collection of additional environmental information and commission additional research regarding important environmental and social issues within the Chukchi Sea and North Slope region.

COMIDA. In preparation for possible oil and gas exploration in the Chukchi Sea, the Alaska OCS Region conducted a three-day Chukchi Offshore Monitoring in Drilling Area (COMIDA) planning workshop November 1-4, 2006, in Anchorage. In total, the agency received 15 study profiles on the various topics discussed by participating experts. The workshop report was published in April 2007, and that input continues to influence research priorities in the Chukchi Sea. Beginning in 2007, the agency developed a new suite of studies in the Chukchi Sea, leveraging more than \$45 million to conduct interim baseline research and monitoring. In recent years, a large percentage of research effort has been expended in new oceanographic studies, including meteorology, ice dynamics, circulations modeling and surface current data collection, benthic fauna and sedimentation, and ecosystem monitoring through hydrographic moorings.

Of course, studies directly related to the BOEMRE ESP are by no means the only sources of relevant, valuable data and analysis of the Chukchi Sea environment and resources. A substantial body of information has been compiled by other researchers as well, including but not limited to universities, government agencies, and industry. The suggestion that the Chukchi Sea is one of the least studied and most poorly understood regions in the world is not accurate.

Information Regarding Ecologically Important Areas. Decades of study in the region have elucidated the heightened importance of many areas within the Chukchi Sea as well as the North Slope. The understanding that certain areas of the Chukchi Sea are of special importance is reflected in recent decisions, such as the Secretary’s 25 Statute mile deferral in the 2007-2012 Five-Year

Program as well as the selection of Alternative IV (which included a corridor deferral) from the Sale 193 FEIS for the decision on Lease Sale 193. Within the present Final SEIS, special consideration is given to coastal communities, the spring lead system, subsistence harvest areas, migratory corridors, Ledyard Bay Critical Habitat Unit, Kasegaluk Lagoon, Hanna Shoal, avian breeding colonies such as Cape Lisburne and Cape Thompson, designated Essential Fish Habitat, caribou calving grounds and insect relief areas, special vegetative communities, marine mammal haulout areas, and many other spatial areas.

Incomplete Information. In addressing the second and third concerns of the District Court’s remand, BOEMRE analysts and managers analyzed each reference to incomplete or missing information within the Sale 193 FEIS, in accordance with the requirements of 40 CFR 1502.22. BOEMRE developed a systematic process under which each item received focused, objective, and complete review. As illustrated in Appendix A of the Final SEIS, this process determined that no items of “incomplete” information collected in Exhibit 129 (which was submitted to the District Court by the plaintiffs) or identified during our subsequent review of the Sale 193 FEIS are “essential” for a reasoned choice among alternatives at the lease sale stage. Therefore, BOEMRE has determined that no new information need be incorporated into the Final SEIS to comply with 40 CFR 1502.22. Similarly, no information beyond what it already provided in the Final SEIS is essential for understanding the potential impacts of natural gas development and production. Additional EIS drafts, comment periods, and interagency research plans will not be necessary to support a decision on Lease Sale 193. Please see Issue 27 below for further discussion of the analysis carried out pursuant to 40 CFR 1502.22.

To further its commitment to sound science and inform future decisions, BOEMRE will continue to incorporate new information from a variety of sources including the ESP, USGS, NOAA, other state and federal agencies, the President’s Spill Commission, universities, and industry.

Response to comments regarding the recently released USGS report is provided in Issue 36.

Issue 9. SEIS assumptions and scope of information.

Summary of Comments

One comment asked BOEMRE to explain several apparent inconsistencies between the Draft SEIS and the Revised Draft SEIS. Several other commenters asserted fundamental challenges to the assumptions and/or scope of the SEIS; relief funding efforts were also addressed. Such commenters stated the following:

- U.S. government lacks authority over Iñupiat lands, waters, and resources. Iñupiat have sole ownership of and authority over (including the power to tax) adjacent oceans.
- BOEMRE’s NEPA documents are deficient because they don’t look at how the human population will be impacted.
- BOEMRE misapplies the concept of “tiering” by deferring the gathering of information to later stages of the OCS Lands Act process.
- BOEMRE cannot rely on the narrow scope of the remand to exclude new information and circumstances arising since the 193 FEIS was prepared. Even if the District Court had not remanded the 193 FEIS, the agency would still need to conduct a supplemental EIS to address the new information that has come to light about bowhead whales and oil spills.
- The difficulty in collecting specific information for the entire Lease Sale 193 area is a consequence of BOEMRE’s decision to offer for lease an area the size of Colorado. The size of the lease sale tends to preclude meaningful site-specific review.

- The SEIS repeatedly states that more information will be required at the exploration and development phases, but it does not indicate what specific information will be needed at those phases. Also, it may be difficult to fill these gaps given the 30-day requirement for BOEMRE to make a decision on a proposed exploration plan. There was little emphasis on filling information gaps during review of Shell's Chukchi Sea exploration plan.
- Existing TAPS infrastructure may not be in sufficient condition to safely transport oil given obsolescence and lack of adequate maintenance. Extending the life of the TAPS may be risky.
- The pipelines used to transport oil and natural gas may not be built correctly or maintained adequately, leading to spills, releases, or other undesirable environmental impacts.
- The Draft SEIS does not explain Best Available and Safest Technologies in enough detail.
- Chapter VI.D. of the SEIS does not comply with CEQ regulations specifying that the EIS shall identify a list of preparers along with other specific information. Compliance with Section 1502.17 is essential in informing the public and decision makers regarding the qualifications of the document's authors, and necessary if BOEMRE wishes to gain the public's trust.
- More information about seismic testing would be appreciated.
- There are some locations in the document that use the name MMS. Where applicable, use of the agency's new name should be conformed.
- The SEIS should consider the risks of a VLOS from a tanker spill.
- BOEMRE may not avoid analyzing the impacts of an activity in an EIS by relying on future mitigation measures. To the extent that mitigation measures are incorporated into the effects analysis, the agency must analyze the efficacy of those measures. There is evidence (from an expert analysis, an expert panel, and the recent USGS report) that mitigation measures such as those posited in BOEMRE's analysis are not always effective.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Scope. The issue of U.S. government authority over Iñupiat lands, waters, and resources is beyond the scope of analysis in the SEIS. However, as a jurisdictional matter, the Federal government holds jurisdiction on the Outer Continental Shelf.

No mandates are established through an EIS, which is an information document prepared pursuant to NEPA. Mechanisms for revenue sharing would have to be established through an act of Congress.

Impacts to People. In its NEPA analysis of potential impacts of the human environment, BOEMRE specifically considers impacts to the human population. Relevant analysis is in the Economy, Subsistence Harvest Patterns, Sociocultural Systems, and Environmental Justice sections of the Sale 193 FEIS as well as the SEIS.

Oil Spills. The SEIS was revised to include a Very Large Oil Spill (VLOS) scenario and analysis intended to address stakeholder concerns.

Claims for Damages. Oil Spill Liability Trust Fund is administered by the National Pollution Funds Center of the United States Coast Guard. The Loss of Subsistence Use of Natural Resources/Loss of Subsistence Use claim is used if natural resources you depend on for subsistence purposes have been injured, destroyed, or lost by an oil spill incident. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost (you do not have to own or manage the natural resource to submit a claim under this category) can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims.

Tiering. BOEMRE correctly applies the concept of tiering under NEPA and CEQ's implementing regulations. The OCS Lands Act establishes a four-stage process established for planning, leasing, exploration, and production of oil and gas resources in federal waters. The OCS Lands Act's four-stage review process gives the Secretary a "continuing opportunity for making informed adjustments" in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner (*Sierra Club v. Morton*, 510 F.2d 813, 828 [5th Cir.1975]). This staged or "tiered" approach to NEPA compliance and decision making is encouraged by the NEPA regulations (40 CFR 1502.20 and 1508.28). 40 CFR 1508.28 states:

Tiering is appropriate when the sequence of statements or analyses is:

- (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

OCS Lands Act – Four Stage Review Process. As provided in 40 CFR 1508.28(a), BOEMRE's NEPA analyses under the OCS Lands Act's four-stage review process proceed from an EIS on a Five-year Program through a regional-level EIS on a lease sale to a site-specific EA or EIS on an exploration or development and production plan. Thus, BOEMRE does not "defer" gathering of information to later stages of OCS activities; rather, BOEMRE analyzes more and more specific information at each stage of OCS activities as the location, time, and intensity of the activities become known and/or are better understood. The amount and detail of the information needed for a NEPA analysis depends upon the decision it is intended to support.

A lease sale EIS supports informed decision making on a specific proposed lease sale. Information that becomes available after the Secretary's decision on the lease sale and the lease sale itself is considered during the technical and environmental review of specific proposed activities related to leases resulting from the sale. New information is also considered and incorporated as appropriate in NEPA analyses for subsequent lease sales.

A lease sale EIS provides an areawide-level analysis that is appropriate to support a decision on configuration and requirements of an areawide lease sale. BOEMRE completes a site-specific NEPA review as appropriate at the exploration or development and production stage when the location (site), timing, and proposed activities are known.

The OCS operating regulations at 30 CFR 250, Subpart B specify the information that must be submitted by a lessee with an exploration or development and production plan. Information is collected and analyzed by the operator prior to plan submission. Appropriate regional and site-specific information is required to be submitted with all plans. Further, additional information is required in support of required permits and authorizations by other federal agencies. For example, air

quality monitoring data is required in support of a Prevention of Significant Deterioration (PSD) permit from the EPA under the Clean Air Act.

Oil and Gas Transport. Consideration of the condition of the TAPS infrastructure to safely transport oil in the future is the responsibility of the other Federal and State agencies and beyond the scope of the this SEIS. The scenario for the analysis in the Sale 193 FEIS assumed the continued permitting and operation of TAPS.

Gas pipelines constructed in support of OCS natural gas production would be new-built to regulatory standards. Requirements for Best Available and Safest Control Technology are intended to prevent accidental release of hydrocarbons into the environment and requirements for oil spill response are expected to minimize the environmental effects of any accidental hydrocarbon release. Project-specific technical and environmental review would be completed if a gas pipeline is proposed. Necessary project-specific mitigation measures would be identified and imposed at that time. Please see also Section I.E.3–I.E.7 of the Final SEIS for further discussion of these issues.

Section I.E.4 of the Final SEIS provides a general explanation of Best Available and Safest Technology requirements because the specific technologies required for compliance are site- and operation-specific and because the standards and technologies that are likely to be available for natural gas development and production 30 years in the future are unknowable at this time.

It is widely recognized that warming could extend the periods which are open to marine transportation through the Arctic. However, sea ice will continue to form every winter and movements of the arctic ice pack will constrain marine transportation for at least 6 months in typical years. Pipelines are more practical and economically viable because they can transport larger volumes of oil for 12 months a year. Our analysis focuses on a pipeline transportation scenario because it is far more likely than marine transportation from this ice-infested Arctic area.

List of Preparers. Some additional information on the List of Preparers has been incorporated into the Final SEIS.

Safety and Enforcement. On October 1, 2011, the safety and enforcement component of BOEMRE will reside within a separate agency, the Bureau of Safety and Environmental Enforcement (BSEE). BSEE will ensure that oil and gas activities on the OCS comply with applicable safety, environmental and conservation standards.

Seismic Testing. Detailed discussion and analysis regarding seismic testing is provided in the Sale 193 FEIS, which the present document supplements.

Discrepancies Between Draft and Revised Draft SEIS. Discrepancies between the Draft SEIS and the Revised Draft SEIS, as well as between the Revised Draft SEIS and the Final SEIS, exist for two reasons. First, BOEMRE's ongoing efforts to improve the document involved continued editorial review and clarifications. Second, this Final SEIS has now undergone two extensive response-to-comment processes. In many instances, the document has been edited in response to public comments.

Future Mitigation. BOEMRE does not rely on the prospect of future mitigation measures to shirk its duties under NEPA. BOEMRE's environmental analysis does acknowledge mitigation measures (whether administered by BOEMRE, another Federal agency, or some other entity) do exist, and are relevant to accurately analyzing potential environmental effects.

Existing Discussion Sufficient. Existing discussion of Best Available and Safest Technologies, the condition of TAPS and existing infrastructure, and other issues not related to the District Court remand is deemed sufficient. More detailed discussion on many of these issues is available in the Sale 193 FEIS.

Issue 10. Natural gas scenario.***Summary of Comments***

A small portion of comments received evaluated the natural gas development and production scenario.

Several comments disapproved of the scenario, citing the following reasons:

- It is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future.
- The assumption that gas development will result in no additional exploration activities because gas development will remain much less financially attractive than oil development is contrary to the agency's past statements on the attractiveness and probability of gas development, and ignores the incentives that a gas pipeline would create for companies to perform additional exploration.
- BOEMRE should analyze the effects of LNG (liquefied natural gas) tankering, a feasible option. The record shows that BOEMRE has promoted and industry has showed an interest in LNG tankering.
- The SEIS should explain when and how the additional pipeline for gas will be built and how that will affect risks to the environment.
- The natural gas release scenario is flawed in that it fails to account for a release from an offshore pipeline that would likely occur under ice, and could impact species such as the bowhead whale, beluga whale, ice seals, Arctic cod, and polar bears.
- The natural gas scenario is flawed because it does not address the following: the number and type of exploration and production wells, alternative pipeline routes and construction and operational activities, noise levels for construction and operations, and alternatives for the infrastructure and activities, including where it crosses land.
- The natural gas scenario should not merely piggyback off the oil scenario, as it is possible that prospective areas for natural gas may differ from the oil development areas in timing or location, that different companies could choose to develop at different locations, and that more than one development platform may be needed.
- There are no maps showing the location of the one assumed platform location, either in the FEIS or the Revised Draft SEIS.
- The assumption that only one platform is needed for gas development is contradicted by materials that BOEMRE provided to coastal communities, which indicated the possibility of more than one offshore natural gas platform location, and more than one potential shoreline landfall and "shorebase" and gas pipeline route.
- The SEIS should analyze the potential effects of different pipeline landfall locations.
- Since the natural gas scenario assumes that landfall would be at Wainwright, a site specific analysis should be done, and additional alternatives or mitigation measures should be considered.
- The SEIS should analyze how local residents could be affected if a natural gas pipeline breaks, leaks, or explodes near its coastal landfall.
- A more thorough assessment of natural gas blowouts should be done, especially in light of the assumption that gas drilling would be done on the same exploratory rigs and production platforms as oil development and production.

- The SEIS should discuss the degree to which the proposed action will lead to increased vessel traffic and provide more analysis on the probability of vessel strikes and the attendant threat to bowhead whales and other marine mammals.
- A more thorough assessment of natural gas blowouts should be done, especially in light of the assumption that gas drilling would be done on the same exploratory rigs and production platforms as oil development and production.

Several comments approved of the natural gas development and production scenario, with a few comments offering minor suggestions. Such comments are summarized below:

- The SEIS correctly assumes that commercial gas production would only follow oil exploration, development and production activities already analyzed in the Final EIS.
- The expectation that economic considerations will restrict any natural gas exploration and production to projects coincident with and subsequent to oil exploration and development is reasonable.
- It is appropriate to conclude that because the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring during the natural gas development and production scenario is unlikely.
- The treatment of incomplete information from the 193 FEIS and incomplete information regarding natural gas in the Draft SEIS could appear inconsistent. BOEMRE should consider bolstering its analysis of the incomplete information from the Draft SEIS by undertaking the same rigorous analysis of that information that it did for the incomplete information from the 193 FEIS.
- The Draft SEIS could be read to be inconsistent in its treatment of well control events. While the Section II.C.3. statement that “any change in the likelihood of an oil spill from a blowout” during exploration drilling would not alter the potential effects of the oil spill already analyzed is true; this sentence as drafted could be read to indicate that the *Deepwater Horizon* incident could affect or change prior analysis of the likelihood of a well control event in the Arctic.
- In Section IV.B.5, the Draft SEIS addresses the potential for natural gas releases, including the potential for a loss of well control. This section does not reference the *Deepwater Horizon* incident, either to adjust the analysis of the likelihood of a loss of well control event, or to explain why the analysis done in the 193 FEIS remains valid. Shell suggests that BOEMRE address this issue, which affects the natural gas development and production scenario and is, therefore, properly within the scope of the remand.
- The natural gas scenario should include discussion of the emergence of shale gas production and its effect on natural gas prices in the lower 48 for the next several decades. Exporting natural gas to Asia is also unlikely given the cost of requisite infrastructure and transport, as well as the OCSLA prohibition on exporting OCS resources.

Source of Comments

- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Assumptions of Natural Gas Scenario. The natural gas development and production scenario contained within the Draft SEIS is the product of thorough analysis of past, existing, and projected

economic and environmental conditions related to potential oil and gas development in the action area and beyond. To provide a reasonable scenario that facilitates environmental analysis of potential impacts stemming from Lease Sale 193, BOEMRE prepared a detailed analysis of the key issues relevant to future natural gas development activities in Arctic Alaska. Based on this analysis, BOEMRE developed the natural gas development and production scenario, a detailed summary of which is provided in Section IV.B of the Final SEIS. The conclusions of BOEMRE's analysis and the assumptions that direct BOEMRE's ensuing environmental analysis remain valid and are not arbitrary.

There is no information to call into question BOEMRE's determination that natural gas production in the Arctic will remain relatively unattractive unless infrastructure for oil development and production already exists. The BOEMRE analysis found that gas development has a large economic disadvantage compared to oil, and production of natural gas becomes feasible only in the event that suitable infrastructure (i.e., offshore platform, onshore facilities, etc.) is in place. Exploration and appraisal drilling of the hydrocarbon accumulation described in the scenario would have delineated the limits of both the oil and gas accumulations prior to the start of oil production. There would be no reason for additional gas exploration drilling prior to the start of gas production. The existence of a future gas pipeline from the North Slope will not alter these realities, especially given the very high cost of exploring and developing additional infrastructure in this area.

The first gas development in the Chukchi Sea OCS would be economically feasible only if it is associated with existing oil facilities. In any case, gas development is highly unlikely until a gas transportation system is constructed from northern Alaska. The scenario analyzed in the Final SEIS represents the most likely situation in view of historical experience in northern Alaska and industry has confirmed our conclusion. It is not practical to attempt to evaluate a wide variety of scenarios, many of which are not feasible options for future gas development.

The rationale for selecting a pipeline as the most likely scenario for future gas development was discussed in several parts of the Final SEIS (see Sections II.C.3, IV.B). Our conclusions are clearly stated and the points are valid without exhaustive economic studies. Individual companies may have conducted their own feasibility studies of transportation options, but these studies are not available in the public domain. General industry comments support our conclusion that the gas scenario analyzed in the SEIS is the most likely one regarding future gas development and transportation.

Tankering Natural Gas. The prospect of transporting liquefied natural gas via tankers was also specifically considered during the development of the natural gas scenario. In Section II.C.3., Issues Considered but Not Analyzed, the Final SEIS provides a detailed explanation as to why analysis of LNG tankering is not as feasible as an overland pipeline system. We also recognize that the State and Federal incentives (e.g., loan guarantee) apply only to a gas pipeline project—not an LNG project with probable exports to overseas markets. We acknowledge that other conceptual designs for gas transportation could be possible, but our detailed analysis focuses on the most commercially feasible strategy. The difficulties facing LNG tankering are summarized in this quote taken from Section II.C.3 of the Final SEIS:

LNG operations will face difficult economic, technical, and regulatory challenges because it is a new concept to the region. LNG operations require expensive infrastructure, including pipelines, a large processing facility, a marine loading terminal, a fleet of LNG tankers, and receiving terminals at market destinations. Numerous feasibility and environmental issues will be present for each of these components in the LNG delivery chain. Marine transportation in the Arctic is restricted by sea-ice conditions that inhibit tanker loadings and transits for 6 months of the year. No LNG ships have been built to handle severe ice conditions common in the Chukchi. Nearshore areas are relatively shallow and water depth could limit the size of LNG ships (loaded draft of 40 ft, [12 m]).

BOEMRE has not and does not promote LNG tankering. To the contrary, in consideration of local stakeholder concerns, BOEMRE requires transportation of produced Arctic OCS oil and gas to shore

via pipeline unless certain factors precluding a pipeline occur. Please see Stipulation No. 3 – Transportation of Hydrocarbons in Section II.B.3.c(1) of the Sale 193 FEIS.

Treatment of Incomplete Information for Natural Gas. It is not necessary to conduct additional 1502.22 analysis of any incomplete information in the Draft SEIS or Revised Draft SEIS. The Final SEIS is written in compliance with the requirements of 40 CFR 1502.22. The types of procedural deficiencies within the Sale 193 FEIS that formed the basis for the second and third concerns of the District Court’s remand do not recur within the Final SEIS. There are no unexplained statements regarding incomplete information made within the natural gas development and production analysis of the Final SEIS. Incomplete information relevant to “reasonably foreseeable significant adverse effects,” and with respect to natural gas development and production, is not “essential to a reasoned choice among alternatives.” Because there is no incomplete information “essential to a reasoned choice among alternatives,” determination of “whether the cost of obtaining the missing information is exorbitant, or the means of doing so unknown,” is not necessary as per the requirements of 1502.22.

To illustrate these points with an example from the Final SEIS, consider analysis of potential impacts to archaeological resources provided in Section IV.C.16, in which BOEMRE acknowledges that it does not possess complete information on the existence or location of unknown archaeological resources. This “missing” information is “relevant to reasonably foreseeable significant adverse effects” given the possibility that natural gas development activities could irreversibly damage currently unknown sites, which would constitute a significant adverse effect. This “missing” information is, however, not “essential for a reasoned choice among alternatives.” As the Final SEIS explains, potential impacts to archaeological resources are similar among all action alternatives given that pipelines would in each case use the same existing oil infrastructure corridor; additional information on the location of archaeological resources would be gathered through required preconstruction surveys and used to avoid or minimize impacts during the Development & Production phase; and other environmental laws and regulations (i.e. pipeline protocols, Section 106 of the NHPA) would greatly reduce the potential for significant adverse effects under each alternative. The text of the Final SEIS also provides the decision maker with comparative analysis of the slight differences between alternatives when it states: “Comparing alternatives, there is a positive correlation between the size of the area deferred from leasing and potential impacts to archaeological resources, but the overall potential for impacts remains small under each alternative” (Section IV.C.16). By identifying all missing information relevant to reasonably foreseeable significant adverse effects, and then explaining why the missing information is not essential to a decision among alternatives at the lease sale stage, the Final SEIS fully complies with 40 CFR 1502.22. Additional language explaining this process, using the analysis of potential impacts to archeological resources as an example, has been incorporated into the introduction to Appendix A of the Final SEIS.

Natural Gas Pipeline. The natural gas development and production scenario provided in Section IV.B of the Final SEIS explains that natural gas production would commence around 2035. Gas pipelines would need to be installed before gas production could begin. The analysis assumes that the pipelines would be installed over several years just prior to gas production (see Final SEIS). A new gas pipeline from the offshore production facility to shore would be constructed during the open-water season in the same corridor as the existing offshore oil pipeline. This offshore pipeline would be trenched into the seafloor as a protective measure against damage by floating ice masses. A second new pipeline would be required to transport gas from shore to a main transportation hub near Prudhoe Bay. This onshore pipeline would be constructed on risers and during winter along the same corridor through NPR-A as the existing oil pipeline to TAPS. The potential effects of installing and operating both pipelines through these corridors are discussed in detail in the Sale 193 FEIS (that analysis is incorporated by reference in the Final SEIS). Discussion of potential direct, indirect, and

cumulative impacts specifically associated with the natural gas pipelines is provided in Sections IV.C and V.B of the Final SEIS.

Gas Release Under Ice. The point was made that the Final SEIS analysis of potential natural gas releases should contain analysis of a pipeline release under ice. Natural gas is less dense than seawater and will rise to the surface in a plume if released at depth. The disposition of gas under an ice cover is controlled primarily by three factors; the nature of the discharge, the condition of the ice, and the physical variables associated with the discharge of gas from a loss of well control or a pipeline leak. Gas venting can occur by a number of mechanisms which include: (a) rupture of the ice sheet due to the buoyancy forces exerted by the pressure wave from the loss of well control incident or gas bubble from a pipeline leak, (b) release of gas through flaw zones or leads passing over the release site, or (c) release of trapped gas to the ice surface through brine channels. Further, recent work (Semiletov et al., 2004) has demonstrated the usual assumption that the sea-ice cover is a barrier to gas exchange between the upper ocean and the atmosphere might need to be reconsidered for ice temperatures greater than -10°C (Gosink et al., 1976). This would mean gas could be released at temperatures lower than -2°C ; up to -10°C . Should the gas be trapped under an ice sheet while the sheet is still growing it could be encapsulated into the growing ice sheet by subsequent growth beneath it. This has been observed to occur during all of the field and laboratory tests conducted to date with oil and gas. In the Arctic spring it would be released to the atmosphere through brine channels when temperatures reached -2.2°C to 6°C (Purves, 1978). If gas was encapsulated in sea ice, it could take 18 to 72 hours for encapsulation to occur, depending on the time of year (Dickins and Buist, 1981). Section IV.C.6 provides impacts analysis of natural gas occurring under ice cavities for 1 to 3 days, prior to encapsulation into the ice sheet. Additional analysis of the possibility of a natural gas release under ice is provided in various portions of Chapter IV of the Final SEIS.

Shale Gas. Emerging shale gas production in the lower 48 and its effect on lower 48 gas prices, as well as the potential for exporting gas, were duly considered while developing the natural gas scenario. More complete analysis of these factors is available in the aforementioned August 26, 2010 memorandum available in the administrative record. The difficulties associated with projected lower 48 markets, as well as attempts to export OCS gas, serve to reinforce the conclusions of the natural gas scenario laid out in the Final SEIS.

Additional Detail Requested. The activities and associated infrastructure are discussed in Section IV.B of the Final SEIS, but we cannot define the exact location of future commercial projects. Until the actual location is known, it is overly speculative to hypothesize alternate pipeline routes or other site specific details. The schedule of construction and operations is also tentative because industry has the option to explore their leases anytime in the primary (10-year) lease term. It should be noted that the original analysis for Lease Sale 193 predicted that the commercial discovery would be made in 2009, so the process is already behind our estimated schedule.

When the Sale 193 FEIS was written, we could not accurately predict the location of leases. After the sale was held, we know the location of the leases, but we cannot predict where future commercial discoveries will be made. It is reasonable to conclude that a costly production platform will only be installed on a commercially viable prospect. No one knows this location at the present time.

Vessel Traffic. Vessel traffic is an acknowledged component of the natural gas development and production scenario, the effects of which are analyzed in relevant portions of Section IV.C. The exact degree to which vessel traffic would increase as a result of the proposed action is difficult to forecast at this time. That said, Section IV.B.4 of the Final SEIS contains estimates regarding the frequency of vessel traffic associated with the natural gas development and production scenario. (Also, note that Section IV.A.2.e of the Sale 193 FEIS provides additional detail on the amount of vessel traffic required to support development and production of oil. The amount of foreseeable vessel traffic associated with the natural gas development and production scenario is not expected to exceed the

level of vessel traffic required to support very similar activities conducted under the banner of oil development and production.)

Consistency with Past Statements. As discussed in the Final SEIS, gas production would follow oil development and would be economically feasible only when sharing existing oil facilities. Oil is the more valuable commodity and has immediate access to outside markets through TAPS. Gas development will require a future gas transportation system (probably an overland pipeline) and gas prices would have to be much higher than current prices to support this expensive project. While it is uncertain whether a gas pipeline project will occur, it is highly speculative to try to predict the location and characteristics of unknown oil or gas fields. The development scenario includes only one offshore oil project, so only one shoreline landfall and onshore support facility is needed.

Site-Specific Analysis of Landfall. It is misleading to predict a specific location for facilities before a commercial discovery is confirmed. The area near Wainwright is a logical place for a pipeline landfall and shore facility because it is the closest onshore location along a direct route from the Chukchi Sea OCS to existing facilities on the central North Slope. However, a site specific analysis is not realistic for a broad area (tens of miles) of coastline. After an offshore project is proposed and a suitable onshore site is selected, then detailed site specific studies can be conducted.

Blowouts. The natural gas scenario includes a natural gas release component. The hypothetical blowout examined in the VLOS Scenario also entails a release of natural gas. The potential environmental effects of a natural gas release are analyzed within various resource sections of Chapter IV. Given the absence of specific suggestions within comments, the low probability for a gas blowout, and the lack of any specific development and production plans to analyze, the existing level of analysis is deemed sufficient.

Issue 11. NEPA requirements for analysis.

Summary of Comments

Most comments included conclusory language regarding the sufficiency of the SEIS under NEPA, or the inadequacy of conducting site-specific analyses and evaluating mitigation measures at later stages in the NEPA process, as follows:

- Some comments characterized the document and process as sufficient and generally found the document's approach to be on track with the District Court's remand, and sufficiently detailed to satisfy NEPA's analytical standards. For example, such comments asserted the SEIS provides a substantially more robust environmental analysis of Lease Sale 193 in a thoughtful and comprehensive discussion, and includes new information on a wide variety of topics. This is clearly a "hard look" at the issues remanded by the court.
- Some comments characterized the document and process as insufficient and generally expressed disapproval of the document's process, level of analysis, conclusions, and/or the public comment process. To this end, it was often stated that BOEMRE appears intent on justifying why it originally held the lease sale rather than meeting its obligations under NEPA and the court order.
- Several comments expressed very specific reasons why the document is inadequate, including arbitrary and capricious analysis, failure to take a "hard look" at potential impacts, lack of effective mitigation measures, undue consideration of economic factors, lack of adequate alternatives, or authorization of illegal activities.

The US Environmental Protection Agency (EPA) made the following points with respect to the sufficiency BOEMRE's analysis under NEPA.

- BOEMRE has produced a succinct document that clearly addresses the deficiencies identified by the District Court.
- EPA is particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. The EPA believes that the process employed by BOEMRE fully meets the intent of CEQ's requirements for such situations.
- The analysis of potential impacts from the natural gas scenario is quite thorough, with clear indication of relatively minor impacts.
- EPA commended BOEMRE for being responsive to requests to perform the VLOS evaluation and believe the analysis will help inform the public, other stakeholders and the decision maker of the full range of potential effects from the project.
- Overall, the Revised Draft SEIS provides a careful and supportable analysis of a VLOS.
- The addition of an Executive Summary would be helpful for readers, particularly North Slope residents who are trying to balance everyday obligations with reviewing the numerous technical documents regarding this region
- The Final EIS should incorporate (within either an Executive Summary or Chapter 2) an impact summary table to facilitate visual comparison of the impacts associated with each alternative.
- Additional figures should be incorporated throughout the text as a visual aid in presenting information. For example, figures identifying active leases and deferral areas would be helpful.

Source of Comments

These issues were raised (implicitly if not explicitly) by all types of commenters, and within the majority of comments received.

Response to Comments

The Sale 193 Final SEIS and BOEMRE's NEPA process comply with CEQ regulations and Department of the Interior guidelines. Additional responses to specific assertions of non-compliance are provided in other relevant portions of this Appendix.

EIS for Proposed EPs. The OCS Lands Act provides for a four-stage process for oil and gas development. This four-stage review process gives the Secretary a "continuing opportunity for making informed adjustments" (*Sierra Club v. Morton*, 510 F.2d 813, 828 [5th Cir. 1975]). During each of these stages the BOEMRE prepares an environmental document under the National Environmental Policy Act. A lease sale EIS provides an area-wide-level analysis that is appropriate to support a decision on configuration and requirements of a lease sale. The BOEMRE completes a site-specific NEPA review as appropriate at the exploration or development and production plan stage when the location (site), timing, and proposed activities are known.

Specifically, BOEMRE prepared an Environmental Impact Statement (EIS) at the lease sale stage for Chukchi Sea OCS Oil and Gas Lease Sale 193 that included an analysis of leasing and exploration of oil and gas in the OCS. When an exploration plan is filed, BOEMRE will perform an environmental review. Pursuant to NEPA, BOEMRE will tier from the Sale 193 FEIS and the Final SEIS to prepare an Environmental Assessment. The Environmental Assessment will provide sufficient analysis for determining whether to prepare an EIS. If the Environmental Assessment analysis supports a Finding of No New Significant Impact (FONNSI), then an EIS will not be prepared.

Additions to the Final SEIS. Consistent with comments from the EPA, an Executive Summary, an impacts summary table, and additional figures have been included in the Final SEIS.

Issue 12. Validity of analysis and conclusions.

Summary of Comments

Many comments asserted that the analysis and/or conclusions within the SEIS are not valid, listing a variety of reasons, including the following:

- The studies used for the analysis are flawed. Studies are usually unable to adequately simulate Arctic conditions. Also, studies should be non-invasive and designed so as to avoid disrupting the behavior being studied.
- The SEIS shows a lack of understanding of this area and the unique environmental challenges of working there.
- In light of changing conditions brought on by global warming, the data used to support the SEIS is obsolete.
- The analysis is insufficient; it does not adequately take into account the weakened and fragile state of a warming Arctic and discounts potential impacts to animal populations.
- The analysis of a development scenario that would occur 10 years from now is too speculative. Receipt of a specific transportation pipeline proposal is required for a sufficient impacts analysis. The extent of the reservoir should be known before determining the lease sale area.
- The analysis lacks adequate specificity. Differences in impacts between alternatives should be quantified, not merely generalized in qualitative terms; there should be more detail in Affected Environment discussion of the physical environment; and summaries of impacts in Ch 2 and Ch 4 are too generic.
- The conclusion that impacts from natural gas development would simply be similar to impacts from oil development is not sufficient.
- It is suggested that BOEMRE identify the new information reviewed in all cases, or where there is no new information available, state that no new information is available.

On a related note, a very large quantity of comments asserted that the SEIS simply does not contain enough scientific information to adequately support a decision. This comment is addressed as a separate issue within this Appendix (see Issue 8 – Not enough information for adequate analysis).

Finally, one comment suggested the assumption that larger deferral areas decrease environmental impacts is not necessarily correct. This comment called for more in-depth discussion within Section II.D.3 of the balancing of risks and impacts associated with a larger deferral area.

Source of Comments

- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Best Available Information. In preparing this SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the Final SEIS analysis. Due consideration was also

given to Arctic warming and associated changes to Arctic ecosystems and animal populations. See Issue Category 6 for additional response to these issues. The effects of climate change are analyzed in detail in the Cumulative Effects chapters of both the Sale 193 FEIS and the Final SEIS.

Reasonable Scenarios. NEPA and its implementing regulations require federal agencies to analyze the reasonably foreseeable impacts to the human environment that could result from a proposed action or alternatives. This requirement sometimes translates into long-range projection of impacts. Such is the case with OCS lease sales. To better analyze potential environment effects that could occur years from now, BOEMRE uses reasonable scenarios. These scenarios predict the timing, characteristics, and extent of potential oil and gas development and production activities in the future. These scenarios inform the environmental analyses, which in turn constitute the heart of the agency's NEPA analyses. With respect to one comment above, a "scenario that would occur 10 years from now" is assumed to refer to the oil development scenario analyzed in the Sale 193 FEIS and summarized for context in the Final SEIS. The oil development scenario is outside the scope of new analysis for the Final SEIS. Thorough NEPA review of a pipeline proposal would occur at a later stage of the OCS Lands Act process, if BOEMRE receives such a proposal. Also, it is not always possible to know the extent of a reservoir at the lease sale stage. Lease sales allow lessees to explore portions of the OCS with the goal of finding commercially viable reservoirs. And despite remarkable progression of seismic technologies that further our understanding of sub-seafloor geology, the existence of commercial quantities of hydrocarbons remains uncertain until the results of an exploration well are known.

Climate Change. The Final SEIS analysis of potential cumulative effects takes climate change issues into full account. Section V.A describes how BOEMRE uses best available data and projections to identify potential contributions of Arctic warming to cumulative impacts, and where the Final SEIS draws the line between reasonably foreseeable factors and unduly speculative possibilities.

Specificity of Information. Given that this analysis is of a scenario that would occur, if it occurred at all, many years in the future, and that the exact location of infrastructure cannot be known at this time, portions of the Final SEIS are necessarily nonspecific at times. Analysts were as specific as was appropriate for each piece of the analysis. The role of the Final SEIS in the Lease Sale process also affects the level of specificity in the SEIS itself. The Final SEIS is a supplemental document that incorporates the Sale 193 FEIS by reference. The SEIS generally summarizes, rather than duplicates, background information, analysis, and conclusions from the Sale 193 FEIS. Readers seeking more specificity on the physical environment in the Chukchi Sea region, for instance, should refer to the physical environmental section of the Sale 193 FEIS. Summary of impact sections in Chapters II and IV serve their limited purpose aptly; readers seeking more detail are referred to relevant portions of Chapter IV.

Similar Effects under Alternatives. To understand why potential impacts under each action alternative are similar, it is important to recall the scope of the SEIS analysis. In complying with the first concern of the District Court's remand, BOEMRE developed a new natural gas scenario and impacts assessment. First, BOEMRE geologists with knowledge of Alaska's oil and gas industry determined the most reasonable natural gas development and production scenario based on current realities and foreseeable trends. Next, BOEMRE analysts reviewed this reasonable scenario and provided new impacts assessments. The scenario and impacts assessments were then incorporated into the Draft SEIS, and have now undergone two public review and comment processes. There are indeed many similarities between the potential impacts of natural gas development and production analyzed in the SEIS and the potential impacts of oil development and production analyzed in the Sale 193 FEIS. This is due to the similarity of activities that would occur under each scenario. For instance, there is little difference in potential impacts between building an oil pipeline and building a parallel gas pipeline within the same corridor. This is not to say that impacts would be identical; the

SEIS carefully notes several instances where potential impacts would vary. The types of effects that could occur during to a VLOS are also similar as between alternatives. Additional responses regarding the VLOS scenario and analysis (including similarities and differences between alternatives) are provided in later Issue Categories.

New Information. In Chapter III of the Final SEIS, BOEMRE carefully identifies new information incorporated into the SEIS analysis. For resource areas where no new information beyond what was considered for the Sale 193 FEIS was necessary for the supplemental analysis of natural gas development and production, statements to that effect are included.

Analyzing Deferral Corridors. BOEMRE has strived to identify, analyze and discuss all of the benefits, as well as the drawbacks, of the deferral corridors (associated with Alternatives III and IV) as they pertain to each particular resource. For expanded discussion and more nuanced explanation of balancing risks and benefits, the reader is referred to Chapter IV. For summaries of the more thorough discussion in Chapter IV, refer to Sections II.D.3 and II.D.4. It is difficult to succinctly summarize all of the implications of deferral the corridors to anticipated environmental impacts. The text of Sections II.D.3 and II.D.4 represent analysts' best attempt to do so in the limited space that a summary section allows. Take for instance the Essential Fish Habitat subsection of Section II.D.3. This subsection summarizes in an appropriate level of detail the proposed corridors' potential benefits (increased distance between oil and gas activities and coastal habitats, slightly decreased potential for an oil spill to contact important coastal resources, potentially more time for response in the event of a spill) as well as its drawbacks (potentially increased pipeline distances, meaning larger construction footprint and increased chance for rupture).

Unique Challenges of the Arctic. Protecting the environment while ensuring the safe development of the Nation's offshore energy and marine mineral resources is a critical part of BOEMRE's mission. In preparing this SEIS, BOEMRE analysts incorporated the best available information gathered from a wide variety of studies, and applied their best professional judgment to evaluate potential impacts. These analysts understand both the unique environment of Arctic Alaska as well as the potential for a given study to disrupt behavior being studied. Consequently, analysts considered the strengths and weaknesses of each study before determining whether its results warranted incorporation into the SEIS analysis. BOEMRE has many subject matter experts preparing the SEIS as well as over 30 years of experience in Alaska in managing the OCS resources which have been subject to leasing, exploration, and development and production. The commenter does not provide a description of how and where the SEIS shows a lack of understanding regarding the unique environmental challenges. Without this specificity from the commenter, BOEMRE response is limited.

Issue 13. Significance thresholds.

Summary of Comments

Several comments criticized significance threshold use in the SEIS analysis. Some of these specifically addressed the significance thresholds used to gauge potential impacts to subsistence activities:

- The significance thresholds were too general, require more detail, and should be more quantitative.
- Significance thresholds are set to where catastrophic consequences to people, culture, and the environment would occur. BOEMRE must set thresholds that comport with applicable environmental laws instead of significance thresholds that assume major violations of statutes such as the Clean Water Act (CWA), Clean Air Act (CAA), and MMPA. BOEMRE cannot assume that these laws can be broken numerous times before causing significant impacts.

Some commenters took issue with the thresholds for marine mammals and Threatened and Endangered Species:

- With respect to marine mammals, a threshold predicated on impacts lasting 3 or more generations is set too high.
- The significance threshold for Threatened and Endangered species is inadequate. For some species currently listed or under consideration for listing, population levels and/or trends are unknown. Thus, there is no basis for determining when the threshold's special standard for "declining populations" applies. BOEMRE should clarify how this threshold would apply for T&E species where population numbers are unknown.

Several comments took issue with the significance threshold for subsistence. These comments made the following points:

- The significance threshold for subsistence vastly understates the importance of subsistence activities and resources for residents of the North Slope.
- Any adverse effect on the hunt, the availability of any subsistence resource, or directly on the subsistence resource population is significant.
- The significance threshold for subsistence should be: "The impact of an activity is considered to be significant when the activity will reduce the availability of a subsistence species to a level insufficient for a harvest to meet subsistence needs."
- The standard should also recognize that effects which make the hunt more difficult, time-intensive, or dangerous are also significant.
- Stock-level reduction is not the correct level at which to judge impacts, since deflection of migration patterns could significantly affect subsistence.
- BOEMRE significance thresholds for subsistence unlawfully stress impacts of long-term duration; whereas, CEQ regulations stress that context for significance includes both short-term and long-term effects. Thus, the 1–2 year element is unacceptable.
- Findings of "significance" should not be limited to resources BOEMRE deems "important".
- Assumptions about how Iñupiat can mitigate impacts are unrealistic and even unlawful in light of provisions in the MMPA. By unlawfully stressing long-term impacts, it was stated, BOEMRE significance thresholds for subsistence activities ignore CEQ regulations which stress that context for significance includes short- and long-term effects.
- Assuming that communities can simply turn to store bought foods ignores the high prices of such food in the villages, health impacts of relying on Western foods, and the social and cultural dependence of Village communities on subsistence hunting.

One comment also stated that the threshold for socio-cultural systems must be revised, but provided no recommendations.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- General Public

Response to Comments

Supplementing the FEIS. The significance thresholds used in the SEIS process are the same thresholds stated in the Sale 193 FEIS, with exceptions noted below.

Re-evaluation of Significance Thresholds. In response to comments regarding the significance thresholds, BOEMRE re-examined all of the significance thresholds to ensure that the thresholds clearly and accurately reflect the BOEMRE considerations in determining significance. Revisions to significance thresholds for subsistence harvest patterns, sociocultural systems, and environmental justice are explained above. During this review, BOEMRE also became aware of two additional thresholds which had confusing language: air quality and water quality. BOEMRE has rewritten these thresholds to clarify for the reader when BOEMRE considers an action significant.

Avoiding Significant Impacts. Major violations of statutes such as CWA, CAA or MMPA (or any other statutes protecting environmental resources) would indeed lead to significant impacts. BOEMRE's significance thresholds are designed and applied to be consistent with this concept. Each threshold is multi-faceted and tailored to address the unique characteristics of the individual resource.

Threatened and Endangered Species. Adjustment of these thresholds for the Final SEIS is not supported by any clear science and would unnecessarily complicate the objective assessment and comparison of impacts. Determining appropriate significance thresholds is a difficult exercise, and reasonable people may disagree on the results. BOEMRE's current thresholds adequately account for the range of potential impacts that may affect a particular resource, balance short-term and long-term effects (as well as high probability and low probability impacts), and protect resources against undue harm. In light of these considerations, no changes to the significance threshold for Threatened and Endangered Species has been made in the Final SEIS. Whether or not a population is declining is determined using best available science and in consultation with the applicable Service (NMFS or FWS).

Protection of Subsistence. BOEMRE Alaska Region has adopted through regulatory practice a position in the context of NEPA that supports the goal of protecting subsistence activities. This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities for several decades. The predominate attribute of this regulatory practice makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest can be minimized in such a manner that the disruption is short term and only results from accidental or incidental encounters. Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233).

Revised Significance Threshold for Impacts to Subsistence Harvest Patterns. In response to comments, BOEMRE revised its significance threshold for subsistence-harvest patterns. A finding of significance is triggered whenever: "Adverse impacts which disrupt subsistence activities, or make subsistence resources unavailable, undesirable for use, or only available in greatly reduced numbers, for a substantial portion of a subsistence season for any community." While generally consistent with how the former subsistence threshold was applied by BOEMRE analysts, it is BOEMRE's intent that this revised threshold (1) more clearly articulates the standard, as it is actually applied; (2) resolves ambiguity regarding application of the subsistence threshold; (3) specifically addresses the concerns raised in comments such as those summarized above.

Analysis in the Final SEIS has been updated to account for this revision. BOEMRE encourages continuing dialogue with stakeholder organizations, and invites interested parties to help develop mutually agreeable definitions in the future.

Sociocultural Systems. In response to comments, BOEMRE reevaluated and revised its significance threshold for sociocultural systems. The new threshold identifies as a significant adverse effect any “Disruption of sociocultural systems that occurs with a tendency towards the displacement of existing social patterns.” Analysis in the Final SEIS has been updated to account for this revision.

Environmental Justice. In response to comments, and to reflect updated thresholds for subsistence-harvest patterns and sociocultural systems, BOEMRE reevaluated and revised its significance threshold for Environmental Justice. The new threshold reads: “Significant effects in this category include impacts on human health or environment that cause disproportionate, high adverse effects on minority or low-income populations. This threshold would be reached in the event of significant impacts to either subsistence-harvest patterns or sociocultural systems (see above). Tainting of subsistence foods from oil spills and contamination of subsistence foods from pollutants would contribute to potential adverse human health effects. Concerns that subsistence foods could be contaminated could also affect human health.” Analysis in the Final SEIS has been updated to account for this revision.

Air and Water Quality.

To address imprecise language, BOEMRE developed a clearer standard, which is organized into two easily understood parts. The first part asks whether the action itself is contributing a significant amount of pollutants on its own, and is broken down into three subparts. Subpart (a) asks whether project-related emissions will amount to more than half the concentration of each pollutant (other than ozone) under the NAAQS. Subpart (b) asks whether project-related emissions will amount to more than half the maximum allowable increase under the PSD criteria. Subpart (c) asks whether the action will emit the precursor pollutants for ozone such that the analyst could expect that ozone to reach more than half the NAAQS. Answering any of these questions in the affirmative would trigger a significant impact.

The first part of the new threshold permits greater emissions of ozone without a finding of significance, as compared with the previous threshold. This increase is appropriate because ozone is not a pollutant that is directly emitted by any source, and the ambient air analysis does not include a dispersion simulation of ozone for comparison to the ozone NAAQS. Rather, ozone is a secondary pollutant formed later in time and sometimes further removed from the emission source. Ozone formation is a result of a photochemical reaction involving the necessary precursor pollutants, VOC and NO_x, in the presence of sunlight. Initial emissions of VOC and NO_x are not directly proportional to the maximum ozone concentration that ultimately forms, and the degree of ozone development is a function of the complex chemistry involved in the ratio of the VOC-to-NO_x mixture (NRC, 1991). As such, the expected significance of ozone formation will be based on the project-level analysis of expected increases in emissions of VOC and NO_x.

The second part of the revised threshold asks whether the project design concentrations, which are the pollutant concentrations caused by the project-related emissions, together with existing background concentrations, will violate the NAAQS. BOEMRE would consider significant those project-related emissions which are not significant on their own, but would surpass NAAQS thresholds when combined with background concentrations.

BOEMRE also clarified the terms and phrases used in the significance threshold. First, the new standard clarifies the phrase “area of at least a few tens of square kilometers,” and resolves ambiguity as to the location of such area. That clause now reads, “an area of at least 20 square kilometers on the nearest onshore area.” Second, BOEMRE defined the term “increase” to be the increase caused by project-related pollutant concentrations, which does not include existing background concentrations. Then, BOEMRE clarified the clause “exceeds half the increase permitted under the Prevention of Significant Deterioration (PSD) criteria or the NAAQS.” The increases allowed under PSD criteria are characterized by the statute as the ‘maximum allowable increase’ for a Class II area, which is the

classification of the entire North Slope Borough and is directly related to the PSD criteria. While the amount of increase permitted is clear under PSD, it is not clear for NAAQS. So, the new definition describes an action as significant if it emits greater than half the NAAQS (except for ozone).

In addition to clarity, the new threshold also adds flexibility by not limiting the threshold to the current set of NAAQS pollutants, and thereby allowing the threshold to be updated with changes to the NAAQS as established by EPA.

In reviewing the water quality threshold, BOEMRE found the language unnecessarily technical. To improve the readability of the threshold, BOEMRE clarified that the threshold takes many different water quality effects into account. The first part of the definition clarifies the following language:

A regulated contaminant is discharged into the water column, and the resulting concentration outside a specified mixing zone is above the acute (toxic) State standard or Environmental Protection Agency (USEPA) criterion more than once in a 1-year period and averages more than the chronic State Standard or USEPA criterion over 25 square kilometers for a month.

BOEMRE simplified this standard to, “The action is likely to violate its National Pollution Discharge Elimination System permit.” Next, BOEMRE cleaned up the following clause:

The spillage of crude or refined oil in which the total aqueous hydrocarbons in the water column exceeds 1.5 ppm (parts per million), the assumed acute (toxic) criterion, for more than 3 days over at least 10 km² and 15 parts per billion (ppb), the assumed chronic criteria, and the State of Alaska ambient-water-quality standard, for more than a month over 25 km²

The new standard, “In the event of a reasonably foreseeable accidental spill of crude or refined oil, the event will exceed total aromatic hydrocarbon or total aqueous hydrocarbon criteria for the Alaska marine- or fresh-water quality standards,” removes the reference to specific levels of concentrations, because the level of concentration where it is known a significant impact occurs may be changed by the state or the EPA over time.

Last, BOEMRE includes a third clause to catch any expected ecological effects that are not caught in the NPDES regulations. The new language is, “The action is otherwise likely to introduce changes in the physical, chemical, or biological characteristics of the waterbody, which cause an unreasonable degradation of the marine environment as determined in accordance with 40 CFR 125.122.” This clause captures any adverse impacts to biota, biological communities, protected species, unique habitats, or human health that would not otherwise be analyzed. The clause specifically references 40 CFR 125.122 which the EPA wrote to analyze whether there is an “unreasonable degradation of the marine environment.” By including this clause, BOEMRE now takes into account the full spectrum of potentially significant effects that could occur through the degradation of water quality.

Revisions to the significance thresholds for air quality and water quality did not change the conclusions of the Sale 193 FEIS or the Final SEIS.

Significant versus Adverse. The absence of a significant effect does not equate to “no effect.” Effects from activities can be adverse and noticeable before they reach the significance threshold. Furthermore, the cumulative effects analysis considers the combined effects of projected activities with other actions, acknowledging that individually insignificant effects can exceed that significance threshold when considered collectively.

MMPA Standards. The MMPA standard of “no unmitigable adverse impacts” is regulated by NMFS, who independently ensures that all activities in the Arctic Ocean, including oil and gas activities, comply with this standard. While BOEMRE lacks the regulatory authority to enforce this MMPA provision, the significance thresholds BOEMRE uses in its NEPA documents are, nevertheless, consistent with this standard. The significance threshold works together with substantive MMPA provisions to identify potential impacts to, and thereby help protect, subsistence

activities. If a NEPA document predicts significant impacts to subsistence, either the project would be altered to reduce potential impacts, or a mitigation strategy would be developed to help maintain the availability of subsistence foods. In addition, required lease stipulations, mitigation measures, and conflict avoidance measures, as well as conflict avoidance measures under MMPA requirements, are followed in locations where the subsistence hunt is affected. The IHA (Incidental Harassment Authorization) requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

Issue 14. Air and water quality

Summary of Comments

BOEMRE received several comments regarding air or water quality that are not otherwise addressed under other Issues within this Appendix. These comments are summarized below:

- The Clean Air Act should be enforced for OCS-related vessels.
- Any reduction in air quality should be considered significant (regardless of whether National Ambient Air Quality Standards [NAAQS] are exceeded).
- BOEMRE should clarify the scope of the air analysis performed for the natural gas development and production scenario and provide a basis for the conclusion that increases in pollutants due to natural gas development and production are likely to be small, local, and temporary. Further, BOEMRE should identify the applicable air quality standards against which it measured the anticipated air quality impacts and provide the basis for its determination of the applicable air quality standard.
- There are children that are not able to return to their Villages on the North Slope because the air is toxic to their lungs due to flaring, toxins, and the lack of scrubbers. These toxins must be affecting marine and other cell life as well.
- BOEMRE's actions could introduce substantially more black carbon into the Arctic environment, where it is most likely to have the most dramatic effect. It is inappropriate to discount these impacts by analyzing black carbon emissions on a global scale.
- "Relatively" unpolluted is not well defined in the discussion of water quality of rivers.
- Section IV.E.2 should note that the NPDES Arctic General Permit for Oil and Gas Exploration is undergoing renewal and in the future there will be separate permits for the Chukchi and Beaufort Seas.

Source of Comments

- State Government
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Air Quality Enforcement. Air emissions from OCS facilities in Chukchi Sea would be regulated by the EPA, which has jurisdiction for OCS air quality as prescribed in 40 CFR Part 55. For facilities located within 40 km (25 mi) of the State seaward boundary, the air quality regulations would be the same as if the emission source were located onshore and, thus, the State of Alaska regulations would apply. For facilities located beyond 40 km (25 mi) of the State seaward boundary, the basic Federal air quality regulations apply.

Air Quality Analysis. The air quality analysis for the natural gas development and production scenario tiers from the air quality analysis in the Sale 193 FEIS. The SEIS used a reasonable, conservative estimate that annual emissions during the gas production phase would be less than 50% of the emissions during the oil production phase. This figure would likely be lower because with oil production only, there would be some gas re-injection. The estimate was based on the professional judgment of a BOEMRE air quality expert, with knowledge of historic and current OCS emissions data and analyses. The assessment used current NAAQS standards because the air quality standards that may be in effect 30 years from now are not known.

Significant Impacts. The Final SEIS includes an analysis of air quality that discloses the possible positive or negative impacts of a proposed federal action. Based on the severity of the impact, considered within the context of the affected region, a judgment can be made regarding the potential for significant impacts (40 CFR Part 1508.27). The severity of the impacts in NEPA documents is measured by comparing the results of the analysis against some standard. The Council on Environmental Quality (CEQ), which governs the implementation of NEPA, authorizes the U.S. Environmental Protection Agency (EPA) to establish standards of measure. There are two sets of air quality standards that are relevant to federal actions proposed on the North Slope. These are the Significant Impact Levels (SILs) and the National Ambient Air Quality Standards (NAAQS). Comparison of project emission against the SILs are required under the Prevention of Significant Deterioration (PSD) program intended to maintain otherwise clean air resources in areas like the North Slope (40 CFR Part 52.21). The SILs define maximum allowable incremental increases in pollutant concentrations caused by the federal action, where emissions that equal or exceed the SILs will be considered to significantly deteriorate air quality; such a project could not be funded or approved by any federal agency. The second level of control is the comparison of an action's emissions against the NAAQS, as required under the Clean Air Act, Section 176(c). The NAAQS reflect the maximum allowable ceiling established for healthful air relative to each regulated pollutant. The air quality assessment of the Proposed Action demonstrates emissions that would not equal or exceed the SILs and would be less than the NAAQS. As such, there is no potential for the Proposed Action to cause harm to human health, environmental resources, or to damage property. Consequently, the air quality impacts are not considered significant. The comment is not clear as to what standard was used to constitute a significant impact, if not the SILs and the NAAQS.

Toxic Air. BOEMRE is not aware of any toxic levels of air contaminants in the communities on the North Slope. This comment has been brought to the attention of the Environmental Protection Agency.

Black Carbon. Potential effects to the environment (both globally and locally) from black carbon emissions are analyzed within Air Quality sections. Additional information and analysis regarding black carbon emissions and their potential effects has been incorporated into the Final SEIS.

Water Quality Analysis. The statement that water quality in the main rivers that flow into the Arctic marine environment remains relatively unpolluted is a general statement providing context by summarizing the more detailed analysis in Section III.A.5 (Sale 193 FEIS), which is incorporated by reference. The reader is referred to the Sale 193 FEIS for more detailed discussion of water quality.

NPDES Permitting. Additional language has been inserted into Section IV.E.2 to reflect upcoming changes to the NPDES Arctic General Permit for Oil and Gas Exploration.

Issue 15. Impacts on marine ecosystems and habitats.

Summary of Comments

Three comments present issues related to marine ecosystems and habitats that are not addressed in other portions of this Appendix. The first identifies two broad categories of information that should be considered essential:

- Information on the distributions and life histories of species which are critical in marine food webs, as well as how loss of sea ice will influence these species. There is a lack of even basic abundance estimates for species such as Arctic cod and Arctic cisco.
- Information on conducting quantitative risk and impact assessments. There is insufficient information about the distribution and productivity of plankton, benthic organisms, fishes, seabirds, the response of marine mammals to noise, ecological changes likely to be caused by sea ice loss, and other basic environmental parameters to support quantitative evaluation of potential and actual impacts from offshore activity, including oil spills. Without such information, risk and damage assessments and projections are reduced to speculation.

Another comment recommended that site-specific ice gouging surveys should be completed prior to leasing.

Source of Comments

- Environmental Organizations
- General Public

Response to Comments

Essential Information. The Final SEIS uses best available science to gauge the potential impacts to marine ecosystems and habitat that may result from the natural gas development and production scenario and from the hypothetical VLOS scenario. A wealth of background information on the marine ecosystems of the Chukchi Sea and factors relevant to risk assessment is also provided in the Sale 193 FEIS, which is summarized and incorporated by reference in the SEIS. Regarding the issue of whether missing information is essential to making reasoned choices among lease sale alternatives, the reader is referred to Appendix A of the SEIS, which compiles the results of BOEMRE's comprehensive analysis of incomplete or missing information (1502.22 analysis). Specific discussion of every item of incomplete information identified in the Sale 193 FEIS is contained therein. Response to related comments is provided in Issue Category 27 of this Appendix.

Ice Gouging. Requiring site-specific ice gouging surveys prior to leasing is not logistically practicable given the relatively large size of lease sale areas, cost, environmental conditions, etc. Nor would this requirement be warranted by environmental concerns or other reasons apparent to BOEMRE. Site-specific shallow hazard surveys that occur prior to any seafloor-disrupting activity are adequate to address any expressed concerns.

Issue 16. Impacts on fish.

Summary of Comments

Several comments regarding impacts to fish were received.

One comment provided a lengthy critique of the fish analysis in the Draft SEIS, focusing on the following points:

- BOEMRE needs to conduct a block-by-block analysis of the Chukchi Sea Planning Area, investigating adverse impacts associated with leasing blocks where rare fish species occur,

and needs to consider removing lease blocks where rare fish occurrences are documented from past studies.

- The recovery of local fish populations from significant adverse impacts cannot be assumed prior to conducting a detailed metapopulation analysis.
- Contrary to assertions in the 193 FEIS, there is potential for significant impacts to rare fish species in the Chukchi Sea Lease Sale 193 area.
- Not enough information is known to confidently develop areas within the Chukchi Sea without risking the regional extirpation of certain fish populations. Blocks should not be leasable or their seafloors modified unless more information is gathered indicating the species (1) has more populations in the Chukchi Sea Planning Area, (2) is more abundant than previous data indicate, (3) has a broader distribution than several point sampling sites, and (4) has known habitat requirements are not unique to that block.

Another comment asserted that information on essential habitat for the most sensitive early life stages of all three commercial fisheries species identified in the SEIS (page 39) is essential prior to leasing.

Two comments criticized the SEIS' analysis of potential impacts resulting from the gas pipeline where it makes landfall. These comments suggest the following:

- There is no scientific discussion of currents, expected changes to water temperature and salinity, alteration of coastal currents that may affect migrations and water quality, changes to beach erosion and sedimentation, moving ice, the highly productive nature of coastal polynya areas, and impacts to Essential Fish Habitat.
- Adverse effects have been noted from similar projects in the Beaufort.

Another comment makes two points about the importance of offshore areas and the effects of seismic activities on salmon:

- Offshore areas of Arctic are very important as habitat for juvenile salmon. There are enormous schools of salmon that congregate here.
- Past seismic activities have altered the migration of salmon and scattered them into more northern rivers that do not normally get large runs.

A final comment takes issue with the finding in Appendix A that four particular items of incomplete information identified in the Final EIS are not considered relevant to reasonably foreseeable significant adverse impacts.

Source of Comments

- Federal Government (NMFS)
- Environmental Organizations
- General Public

Response to Comments

Adequacy of Information and Analysis. BOEMRE agrees that protection of rare fish and early life stage habitat, the ability to predict recovery rates of local fish populations, and avoiding significant impacts are all legitimate scientific concerns. Additional data on these subjects will continue to be sought and incorporated into NEPA analyses. However, the Final SEIS concludes that natural gas development and production would not cause significant adverse impacts on fish. Because no significant adverse impacts would occur, conducting a detailed metapopulation analysis is not necessary at this time. Regarding other types of information asserted to be missing, the reader is referred to the 1502.22 analysis provided in Appendix A of the Final SEIS, which demonstrates no additional information (including additional information on recovery rates, locations of regionally

rare fish populations, or potential early life stage EFH) is essential to a reasoned choice among alternatives.

In July 2011 BOEMRE submitted an EFH Assessment to NMFS regarding proposed leasing and exploration activities in the Chukchi Sea.

Impacts to Juvenile Salmon in the Chukchi Sea. BOEMRE recognizes that the Arctic offshore, particularly the Chukchi Sea offshore, is important to juvenile salmon. Many sources of information, both western science journal articles and shared traditional knowledge, document the existence and importance of Pacific salmon in the Chukchi Sea and the freshwater rivers and streams along the Chukchi coast.

The many salmon-spawning rivers, streams and lagoons along the Chukchi Sea Coast and Western Beaufort Coast are indicative of the numbers of juvenile and adult salmon that rely on the Chukchi offshore waters for some portion of their lives. Chukchi coastal rivers and lagoons such as the Kuk, Kokolik, Utukok, Ikpikpuk and Kukpowruk rivers, and the Kasegaluk Lagoon along the Chukchi Sea coast are known to be important to spawning pink salmon (ADFG, Anadromous Waters Catalog, 2011). Juvenile pink and chum salmon were captured in high numbers in the Chukchi offshore environment in 2007 (Moss, et al., 2009). Subsistence take of salmon in the Chukchi coastal waters has been recorded in several documents compiling traditional knowledge (Braund 2010, 2011; Woods and Carothers, 2011). The BOEMRE welcomes the commenter to share additional local knowledge regarding juvenile salmon occurrence in the nearshore and offshore Chukchi and Beaufort seas.

Impacts to Salmon from Seismic Activities. Salmon have been reported by several sources, both western science journals and compilations of local and traditional knowledge, to be occurring farther north in Arctic rivers, streams and the marine environment. In many of these reports, warming sea temperatures and decreases in sea ice are attributed to the salmon movement, range extensions in marine waters and entry into previously-undocumented freshwater spawning areas. The commenter reports that the movement of salmon into farther north rivers is attributable to past seismic activities. Seismic activity has been shown in some western science publications to affect fish behaviors. To date, however, the shift of large groups of migrating salmon at sea due to seismic activities has not been tested. BOEMRE is currently working with university faculty and other agency staff on acoustic effects on fish and welcomes local knowledge on this topic to help inform study development and interpretation of results.

Minor Revisions. Minor modifications have been made to portions of the Final SEIS addressing water quality, fish resources, and Essential Fish Habitat to expand upon the analysis, increase accuracy, or resolve ambiguity. This includes clarification of potential impacts associated with the coastal landfall of an offshore natural gas pipeline.

Relevance of Incomplete Information to Significant Effects. Appendix A presents detailed analysis of each item of incomplete or missing information mentioned in the Sale 193 FEIS. Of the four particular items referenced in the comment, none were determined relevant to reasonably foreseeable significant adverse effects from the particular proposed action analyzed in the Sale 193 FEIS and Final SEIS. It should be mentioned that a relative lack of studies on a particular subject does not establish a nexus between that subject and potential significant effects from oil and gas leasing. Sufficient explanation of each determination at issue is provided in Appendix A. Additional responses pertaining to the general issue of incomplete information is provided in Issue Category 27.

Issue 17. Impacts on Endangered or Threatened species.

Summary of Comments

Several comments addressed Endangered or Threatened species, as follows:

- It is unclear what new information regarding whales (sightings of fin whales, humpback whales, or both) resulted in re-initiation of ESA consultation with the NMFS for OCS activities.
- Section 7 consultation should be reinitiated in light of recently-designated polar bear Critical Habitat. The SEIS should be put on hold, if not canceled, pending completion of consultation, and BOEMRE should re-initiate full, formal consultation as opposed to incremental consultation.
- The conclusion on page 100 of the Revised Draft SEIS that impacts to polar bears would be minimal is not consistent with studies that demonstrate the harmful effects of oil on polar bears.
- Because new data shows significant use of the proposed lease sale area by bowhead whales, there is an increased likelihood that noise and disturbance will be greater, such that vessel strikes may now become an important source of injury. BOEMRE should incorporate new information regarding the migratory pattern of bowhead whales and impacts to whales from geophysical operations, anthropogenic noise sources, and vessel strikes.
- BOEMRE should develop an alternative that requires the use of new and improved technologies (such as survey equipment that does not depend upon seismic waves) that would mitigate impacts to bowhead whales.
- Agency analysis regarding the levels of sound that bowhead whale can withstand are flawed. Traditional knowledge teaches that bowheads are very sensitive to noise.
- There is no mention of the yellow-billed loon, a candidate species under the ESA, in the Threatened and Endangered Marine and Coastal Birds section of the SIS.
- The SEIS should include more thorough analysis of the impacts to bowhead whales resulting from an oil spill by addressing MMPA requirements. This comment notes that the MMPA requires mitigation efforts to demonstrate how an oil spill will not result in take of the bowhead whale.
- The SEIS must disclose and provide more analysis of the incomplete information pertinent to understanding bowhead breeding, feeding, and migration habitat.
- The low recovery rate of bowhead whale requires more careful examination of potential effects from a large oil spill.
- The SEIS should explain the exact number of threatened Steller's or Spectacled eiders that industry can "take."
- Seismic activities can harass bowhead whales, creating risks to the resource as well as subsistence.
- The agency lacks substantial support for its statement that "at present, available data does not suggest that strikes of bowheads by oil and gas-related vessels will become an important source of injury or mortality" (SEIS at p. 95). More analysis is needed.
- The VLOS analysis needs to explain the circumstances under which "some cetaceans may require three or more generations coincident with restored and unaffected habitat to restore distribution and populations," and analyze whether these conditions will in fact occur.
- The statements in Section III.B.4 regarding bowhead migration through the lease sale area should be clarified to further distinguish between spring and fall migrations.

One comment suggested two categories of information with respect to endangered and threatened species that it found essential to a reasoned choice among alternatives:

- Information on how distribution of species of concern (including ESA candidate or listed species) may shift due to climate change. The ability to predict such shifts is deemed necessary to evaluate the life-cycle impacts of offshore development and infrastructure.
- Information that would allow BOEMRE to analyze the importance of the deferred areas to bowhead whales. This information is deemed essential in light of admittedly limited recent data on distribution, abundance, and habitat use in the Chukchi Sea, as well as the stated purposes of the deferral areas.

One comment warned against assuming that larger deferral areas would decrease environmental effects. While increasing the deferral area would likely move development and infrastructure offshore, the comment stated that impacts to bowhead whales will not necessarily be reduced. The increase in distance may increase marine vessel and aircraft traffic and, in turn, increase risk and adverse impacts. This comment called for more in-depth discussion within Section II.D.3 of the balancing of risks and impacts associated with a larger deferral area. The current deferral area, along with applicable mitigation measures, provides ample protection to marine mammals and subsistence activities. Given the potential impacts associated with moving facilities further offshore, it is debatable whether a larger corridor would really decrease adverse impacts.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- Local Governments
- Corporations and Industry Groups
- General Public

Response to Comments

Information Gaps. BOEMRE takes very seriously the recognition of information gaps and scientific knowledge in the Arctic regarding species and their habitats, and is an aggressive participant in initiating and completing research efforts to address such information gaps. BOEMRE has thoroughly investigated the current information and finds it sufficient to assess the potential effects of leasing in the Chukchi Sea and the resulting level of activities specified in the analysis scenario. BOEMRE, NMFS, and FWS continually evaluate activities and monitoring to determine and improve effectiveness in practices to protect marine animals, and will continue to assess and include new data as it becomes available for future environmental analyses.

ESA Consultation – Whales. Prior to the release of the Sale 193 FEIS, NMFS did not consider fin or humpback whales to be present in the action area. To this end, Section III.B.4 states: “During the 2006-2009 open water seasons, marine mammal observer (MMO)-monitoring associated with seismic surveys, barging, and marine research in the Chukchi Sea documented sightings of fin whales and humpback whales.” In a letter dated December 3, 2007, BOEMRE proposed to re-initiate ESA consultation with NMFS for OCS activities. Chapter VI of the SEIS contains additional information regarding ESA consultations associated with Lease Sale 193.

ESA Consultation – Polar Bears. BOEMRE will meet all of its Section 7 responsibilities in terms of polar bears and their newly-designated Critical Habitat (75 FR 76086 [7 Dec 2010]). BOEMRE has conferenced with FWS since Critical Habitat was first proposed on October 22, 2009. Now that Critical Habitat has been designated, BOEMRE has reinitiated consultation with the FWS. Incremental consultation is appropriate and will continue concurrent with BOEMRE’s NEPA processes. New language was been added to the Final SEIS recognizing the designation of Critical Habitat units and, in particular, addressing terrestrial denning habitat (CH Unit 2) as it relates to

natural gas pipeline construction. Chapter VI of the Final SEIS contains additional information regarding ESA consultations associated with Lease Sale 193.

New Information – Whales. BOEMRE acknowledges new data regarding the movements of individual bowhead whales during the fall/winter in the Chukchi Sea. BOEMRE has included in the Final SEIS the available published new information from COMIDA (2009, 2010, 2011) and from Clarke et al., (2011) survey data, satellite tagged whale and traditional knowledge investigations (Quakenbush et al, 2010a; Quakenbush, Small, and Citta, 2010), and required industry monitoring reports. We have thoroughly evaluated the potential and anticipated effects upon bowhead whales and their habitat use patterns from oil and natural gas operations including geophysical operations, anthropogenic noise sources and vessel strikes. This information supports BOEMRE's understanding of seasonal whale movement patterns. Quakenbush et al. (2010) and Quakenbush, Small, and Citta (2010) indicated that all satellite tagged whales travelled through the Lease Sale 193 area, most whales crossing the area in less than a week. Quakenbush et al. (2010) and Quakenbush, Small, and Citta (2010) discuss the considerable limitations of these data: small sample sizes relative to the total population sex and age structure, sample timing, and other biases. While the data is important to our understanding of bowhead whale biology, a more robust data set and, over time, sampling that is representative of the population, is needed to provide for more conclusive analyses. Further, the authors concluded that "the fall migratory corridor between Barrow and the Bering Strait is poorly defined."

Vessel Strikes. There are a number of factors to be considered when evaluating the risk of vessel strikes. Under certain circumstances, vessel noise and traffic can result in avoidance behavior by bowhead whales. Anticipated traffic by large vessels during oil and gas activities—such as seismic surveying operations, sea lift operations, moving drilling ships, and icebreaking—involve speeds of 4-6 knots. The majority of documented vessel/whale collisions and injury occur at speeds of over 10 knots (NMFS, 2004). Support vessels and vessels in transit to and from activity areas can travel at speeds greater than 6 knots. These OCS-related vessels have marine mammal observers to dictate reductions in speed, course alteration, and distance buffers between vessels. These measures (marine mammal observers) are consistently required by NMFS within Incidental Harassment Authorizations and by FWS in Letters of Authorization issued under MMPA for the Chukchi Sea region, and are intended to reduce the likelihood of collision-related injury and mortality to marine mammals. Therefore there is little likelihood of increasing collisions and other injuries from these vessels in the Lease Sale 193 area. Vessel activity could increase in remote parts of the Lease Sale 193 area where vessel activity was nearly absent in the past; however, injury and mortality from vessel interactions with marine mammals are currently negligible and are anticipated to remain so. The Final SEIS has been revised to augment the analysis of potential effects from vessel strikes.

Alternative Technologies. BOEMRE encourages use of alternative technologies for oil and gas exploration and is currently performing an analysis of such technologies for the Environmental Impact Statement on the Effects of Oil and Gas Activities (Seismic Surveys and Offshore Exploratory Drilling Activities) in the Arctic Ocean (U.S. Chukchi and Beaufort Seas) as a cooperating agency with NMFS, who is the lead agency. Alternative seismic survey sound sources analyzed to date are not adequate to replace airguns as a tool for oil and gas exploration. These technologies are neither fully developed (to penetrate to the depths needed for oil and gas assessment) nor are they commercially available at this time. BOEMRE conducts technical reviews and environmental assessments for all proposed OCS operations in Alaska in accordance with 30 CFR 250 and 30 CFR 251 and, in cooperation with NMFS and FWS, produces measures to mitigate impacts to the bowhead whale and other marine mammal species.

Yellow-billed Loon. The yellow-billed loon was identified as a candidate species after publication of the Sale 193 FEIS. The SEIS makes a distinction between summarized information from the Sale 193 FEIS and new information introduced in the SEIS. The yellow-billed loon and its current status under

the ESA are discussed in New Information subsections within III.B.4 and III.B.5, and in subsection IV.C of the Final SEIS. Potential impacts to loons from natural gas development and production activities are analyzed in Section IV.C.9, Marine and Coastal Birds.

Climate Change. It is acknowledged that species ranges, oceanographic/atmospheric parameters, and ocean productivity shifts are likely to occur as result of climate change and, indeed, we are observing and monitoring such changes. As such changes manifest themselves, we must monitor and evaluate them and respond with appropriate protective actions. The Sale 193 FEIS and the Final SEIS use best available information to identify reasonably foreseeable components and trends of Arctic warming. An attempt to predict the exact changes that will occur over the next few decades would be highly speculative at this time. A strategy to assess and reassess activities over the time period and rates that the ecosystem changes occur, appears to be a prudent way forward to protect species and habitats. We cannot always predict with accuracy the rates or magnitude of changes, or in some cases how changes will develop. The same applies to energy development because we cannot predict with accuracy when or where resources will be found, the magnitude of such a discovery and whether development will occur, or if resources will be found or developed at all. This is the main reason for an incremental approach to energy development so that analysis at each phase of energy activity (planning, leasing, exploration, development and production) undergoes analysis specific to the circumstances present at the appropriate time.

Bowhead Migration Patterns. The protection of bowhead whales indicated in the various alternatives is focused on protecting well documented vulnerable time periods, habitats, and biologically sensitive life functions. These include the spring polynya system, where the majority of the bowheads migrate and nurture newborn calves in an ice-restricted area. The fall migration corridor remains poorly defined (ADF&G, 2010) and the bowhead migration is not as sensitive or constrained as during the spring period. There is no evidence supporting the deferral of additional specific portions of the Lease Sale 193 area to benefit bowheads during their fall migration.

Text changes were made to Section III.B.4 to clarify spring and fall migration and satellite tagged whale movement within the Lease Sale 193 area.

Bowhead Sensitivity to Noise. BOEMRE recognizes bowheads can be very sensitive to noise. Responses to noise and tolerance levels to various noise sources displayed by bowheads are variable depending on contextual variables such as whale activity (feeding, migrating, resting, nursing etc.) the composition of sex, age, and group demographics (i.e. cows with calves, single males, juveniles, etc.), past experience with similar noise, and the nature of the noise source and sound propagation environment at the time of exposure. The 180 dB re 1 μ Pa is the lower threshold established by NMFS for preventing injury to bowhead hearing, while the 160 dB re 1 μ Pa is the received level of sound established by NMFS, at which baleen whales display disturbance behaviors such as avoidance responses. These are not the maximum levels that bowheads can withstand, but rather are received sound levels at which protective mitigation measures are implemented to prevent injury (180 dB level) and to determine the potential exposure rates to noise levels that would result in behavioral responses (160 dB level) that may incur stress and energy expenditure to a majority of exposed individuals. BOEMRE deems the 180 dB and 160 dB thresholds as a sufficient gauge of potential impacts. NMFS's development and use of these thresholds to regulate take under the MMPA and ESA corroborates this position.

Low Recovery Rate. We have carefully reviewed available literature regarding cetacean and bowhead whale contact, inhalation, ingestion, contamination with a large oil in the Lease Sale 193 FEIS, Section IV.C.1.f(1)g) and a very large oil spill (VLOS) in the Final SEIS, Section IV.E.7. We have evaluated the potential for oil spill occurrence, contact with bowhead habitats, subsequent potential for spill related injury and mortality to the Western Arctic bowhead population including

vulnerable sex and age classes. We have identified situational circumstances whereby an annual cohort may be implicated as well as longer term effects upon recruitment and reproduction.

Conditions Facilitating Recovery. The VLOS analysis evaluates effects of a hypothetical scenario that integrates widely differing variables in terms of spill location, trajectories under various conditional circumstances, and contact of Environmental Resource Areas (ERAs) that do not determine the degree of contact of specific ERAs. Gray whales, beluga whales and harbor porpoises are the cetaceans that could potentially require 3 or more generations to restore pre-spill distribution and populations. It would be speculative at this time to determine the interactions of all the factors and variables that are possible with a very large oil spill that may create an environment where three or more generation times is required for recovery. There are multiple sets of circumstances that could result in disruption and modification of the gray whale population and habitat in the Chukchi Sea. Gray whale displacement, redistribution, loss and rate of recovery of habitat (prey), direct loss of numbers through health related factors such as starvation and reproductive productivity that could be dependent upon a number of factors acting either alone or in combination that result from a VLOS. These factors could vary widely and include the temporal and spatial distribution of a spill; rates and fate of petroleum in relation to concentrations of gray whales; rate and longevity of injury, mortality, contamination and subsequent ingestion of contaminated prey; intensity and longevity of cleanup operations in key gray whale feeding or migration areas; proportion of the gray whale population injured, killed and/or displaced from a contacted ERA(s); gray whale success in finding adequate alternate feeding areas if needed. Pre- and post-spill monitoring of these factors is currently the means by which BOEMRE can evaluate the actual impact of, recovery and restoration of gray whale habitats and population. A similar approach applies to beluga whales and harbor porpoise. It would be presumptuous to determine the multitude of specific combinations of circumstances that could decrease or eliminate (short or long term) distribution, displace individuals or portions of the population, damage habitat and prey bases, or effect the rates at which restoration of these parameters take place if at all. Harbor porpoise numbers are few and mortality or displacement of local groups whose restoration may be dependent upon the pioneering capability of adjacent members of the population to restore distribution and population levels in damaged areas, recovery rates of localized seasonal prey. This could in recovery taking decades depending on the multitude of circumstances.

Oil Spills, Bowhead Whales and the MMPA. In the event of an oil spill, it is anticipated that adverse impacts would accrue to bowhead whales. Potential impacts are analyzed in the Sale 193 FEIS (in reference to a “large” oil spill) as well as the SEIS (in reference to a “very large” oil spill). To the extent that these impacts constitute unauthorized “take” of one or more bowhead whales, there would be a violation of the MMPA (and the ESA). “Take” under the MMPA includes both “harm” and “harassment,” and each of these thresholds in turn encompasses a variety of activities. All potential adverse impacts to bowhead whales (including impacts that may qualify as “harm” or “harassment”) are considered in BOEMRE’s NEPA documents, including the SEIS. However, specific determinations as to whether impacts exceed MMPA thresholds are a regulatory responsibility held by NMFS.

Incomplete Information About Bowhead Whales. Consistent with 40 CFR 1502.22, BOEMRE has disclosed and discussed all incomplete or missing information relevant to reasonably foreseeable significant adverse effects to bowheads and other environmental resources from natural gas development and production, as well as from a VLOS. For an example, please refer to the portion of Section IV.E.7 analyzing potential impacts to bowheads in the event of contact with oil. For additional discussion of what is known and not known about bowhead whale breeding, feeding, and migration habitat, one can refer to the Sale 193 FEIS, which the present document supplements, or to Appendix A.

Steller's Eiders and Spectacled Eiders. Incidental take for Steller's eiders and Spectacled eiders was identified on p. IV-125 of the Sale 193 FEIS (USDOJ, MMS, 2007a; incorporated by reference) and in Section IV.C.8 Marine and Coastal Birds – Threatened and Endangered of this Final SEIS.

Seismic Activities. Detailed discussion and analysis regarding seismic testing is provided in the Sale 193 FEIS, which the present document supplements.

Deferral Areas. Applicable mitigation measures apply the best state of the technology to aircraft and vessel traffic to minimize adverse impacts to bowhead whales to negligible or low levels. We agree that increased travel distances could potentially incrementally increase exposure of bowheads to vessel and aircraft traffic; however, vessel and aircraft travel distances would not necessarily increase. Potential energy prospects, discoveries and development within the final lease area would remain static and not “move” development and infrastructure further offshore as result of an increased deferral area. An increased deferral area would effectively protect the proportion of bowhead whales that utilize habitats within additional deferral area where some activities (drilling, platform construction and operations, construction and operation of product gathering infrastructure) would no longer occur. Bowhead whales utilizing habitats within the lease area would be subject to the proportionally the same level of adverse impacts from development activities under the deferral area noted in Alternative II less the impacts that might have occurred in an increased deferral area.

Impacts to Polar Bears. Conclusions presented on page 100 of the Revised Draft SEIS concerned only those potential impacts that could occur via the natural gas development and production scenario. To date, impacts to polar bears in the Beaufort Sea from oil and gas industry activities appear to be limited to disturbance and exclusion from some localized habitat areas. There is no reason to assume that a different level of impact would occur from similar activities in the Chukchi Sea. Oil spill impacts, meanwhile, are discussed in the Sale 193 FEIS and Section IV.E of the Final SEIS.

Issue 18. Impacts on birds

Summary of Comments

One commenter asserts that the Analysis of Incomplete or Missing Information (SEIS, Appendix A) and natural gas development and production analysis inadequately assess potential impacts to birds, as follows:

- Regarding the 1502.22 analysis, the following information is essential for a reasoned choice among alternatives: information about how and when marine and coastal birds use coastal areas, especially given the acknowledged correlation between deferral corridors and potentially serious impacts to birds from a large oil spill; information that BOEMRE prepared in connection with its Section 7 consultation with the Fish and Wildlife Service on threatened spectacled and Steller's eiders; several important studies pertaining to potential impacts to birds that were not incorporated into the Draft SEIS; information regarding long-term trends in marine bird distribution and variation due to climate change.
- BOEMRE has not sufficiently analyzed the effects of gas development and production on birds. Rather than avoiding substantive analysis by stating that later analyses and permitting processes will prevent impacts to birds, the agency should more specifically analyze the effects that disturbance could have on different species of birds, including threatened and endangered species. The SEIS should also consider increased predation, especially from increased populations of arctic foxes which may be attracted to development infrastructure.

- The apparent contradiction between the statement on page 102 that “[a]dditional facility footprints were no[t] considered necessary” and the statement on page 104 that the “natural gas scenario entail[s] expansion of the onshore facility” should be addressed.
- Given that predators could be attracted to infrastructure or additional human foods or garbage, unsupported conclusions that development will occur in a manner so as not to attract predators is incongruous with the component of the natural gas scenario which entails expansion of onshore facilities.

Source of Comments

- Environmental Organizations

Response to Comments

The Analysis of Incomplete or Missing Information (Final SEIS, Appendix A) determined—with respect to long-term trends in bird populations and variation due to climate change—that no incomplete information in the Sale 193 FEIS was essential to a reasoned choice between alternatives. Rather, the information and analysis within the Sale 193 FEIS was more than adequate to make clear distinctions between alternatives and support an informed decision. Additional datasets are not essential to making a reasoned choice among alternatives.

Patterns of Use within Deferral Areas. The distribution, abundance, and temporal use patterns of marine and coastal birds are described in the Chapter III, Description of the Affected Environment in the Sale 193 FEIS. Sufficient information was available to evaluate the benefits of deferral alternatives to marine and coastal birds, including the benefits of deferrals in regard to a large oil spill. Analysis on potential impacts under Alternative I is provided in detail on pages IV-134 through 145 in the Sale 193 FEIS.

With respect to the specific benefits of Alternative III to birds and important bird habitats, the Sale 193 FEIS explains:

This alternative would provide the largest deferral area and provide the greatest net resource benefits to marine and coastal birds. This deferral area would be in the form of a corridor on the shoreward margin of the proposed lease-sale area. The primary benefit of this corridor is that it would move sources of potential adverse effects further away from important bird habitats. The increased distance between offshore development and coastal bird habitats conceivably would decrease the percent chance of spilled oil contact, increase weathering of spilled oil prior to contact, and increase available spill-response time.

With respect to specific benefits of Alternative IV to birds and important bird habitats, the 193 FEIS explains:

This alternative has a smaller deferral area than Alternative III. The deferral area would be in the form of a corridor on the shoreward margin of the proposed lease-sale area. The primary benefit of this corridor is that it would move sources of potential adverse effects farther away from important bird habitats. The increased distance between offshore development and coastal bird habitats would conceivably decrease percent chance of one or more [large] spills contacting important bird habitats, increase weathering of spilled oil prior to contact, and increase available spill-response time. This alternative would provide the same types of net resource benefits as Alternative III, but at a reduced level.

ESA Consultation – Steller’s Eider. Information that BOEMRE prepared in connection with its Section 7 consultation with FWS on threatened spectacled and Steller’s eiders satisfies ESA requirements, requirements distinct from NEPA. BOEMRE analysts use comprehensive information and analysis to satisfy both of these obligations. Often this information and analysis is derived from the same sources and studies. The Sale 193 FEIS contained sufficient information (see Sale 193 FEIS

Sections IV.C.1.f, IV.C.1.g, V.C) on spectacled and Steller's eiders to distinguish between alternatives and inform the decision maker about potential environmental effects.

Distributions of Marine Birds. The best available scientific information regarding changes in the distribution of marine birds is discussed in the Sale 193 FEIS. Additional information was incorporated into the Draft and Revised Draft SEIS and Section 7 consultation documents, as appropriate. NEPA does not require a listing of all the information that is considered, but not incorporated and specifically cited, within the environmental impact statement. Thus the lack of citation of a particular publication does not indicate that the information was not considered in the analysis. BOEMRE appreciates the list of citations provided by the commenter, but BOEMRE did not find any reason to revise the text based on these studies.

The commenter specifically references the Coastal Response Research Center (CRRC), which was established as a partnership between the National Oceanic Atmospheric Administration (NOAA), through the Office of Response and Restoration (OR&R), and the University of New Hampshire in 2004. The CRRC partnership stimulates innovation in spill preparedness, response, assessment, and implementation of optimum spill recovery strategies. The primary purpose of the CRRC is to bring together the resources of a research-oriented university and the field expertise of OR&R to conduct and oversee basic and applied research, conduct outreach, and encourage strategic partnerships in spill response, assessment, and restoration.

On April 22, 2010, the CRRC and NOAA's Office of Response and Restoration completed a workshop on planning for (post-spill) NRDA (Natural Resource Damage Assessment) in the Arctic. According to CRRC 2010, outcomes from that workshop included the following:

- **Arctic Baseline Shifts:** Physical conditions and biological use of Arctic habitat are changing. Indications include Bering Sea fish moving north; walrus moving into the shoreline areas, polar bears moving into shoreline areas and tundra; changes in ice cover and thickness; and longer periods of tundra thaw.
- **Baseline Data:** A large body of environmental data was identified that has been collected at various locations and for several purposes (e.g., fisheries monitoring, oil and gas lease development). In order to maximize its usefulness for NRDA, this data must be synthesized and made publically available. Targeted additional data collection would also be useful.

Long-term Data. The commenter also mentions conclusions drawn by certain researchers participating in the *Northern Oil and Gas Research Forum: Current Status and Future Directions in the Beaufort Sea, North Slope and Mackenzie Delta* who described the value of future, long-term data sets, especially regarding lake chemistry and permafrost in coastal areas of the Beaufort Sea. The specific relevance of the proceedings in relationship to the Chukchi Sea is not clear. BOEMRE uses long-term datasets when such information is available. While these data sets do not exist for every resource, BOEMRE found that long-term data sets of this type were not essential for a reasoned choice between lease sale alternatives.

Effects to Birds from Natural Gas Scenario. Sections IV.C.8, IV.C.9, V.B.6, and V.B.7 of the SEIS analyze the potential impacts to birds associated with the natural gas development and production scenario. This analysis identifies all reasonably foreseeable potential impacts. More specific quantification of impacts is impossible at this time given lack of specific project locations or plans, the inherent uncertainties of environmental conditions 30 years from now when natural gas projects may commence, etc.

The potential that birds could be affected by increased predation due to natural gas development received additional analysis in the Final SEIS.

Contradictions in Statements and Unsupported Conclusions. The contradictions indicated regarding components of the natural gas scenario have been resolved and clarifying revisions are provided in the Final SEIS. Also, a NSB ordinance concerning food and garbage handling along with other requirements to prevent wildlife (especially brown and polar bears) access to human-use foods and garbage are anticipated to be in effect. It is inappropriate to conclude that these measures would be ineffective. While the Revised Draft SEIS indicated the shore facility may change to accommodate gas production, no new sources of garbage or human-use foods would be created.

Issue 19. Impacts on marine mammals

Summary of Comments

Several comments concerned marine mammal issues that did not fit within other issue categories of this Appendix.

One of these comments called for study of the effects of noise pollution on beluga in the Point Lay and Kotzebue Sound Area before any lease sale.

Another asserts that several types of information related to marine mammals and their habitats are missing from the Sale 193 FEIS and the SEIS and are essential for a reasoned choice among alternatives, as follows:

- Knowledge of where Pacific walrus will be during summer. This comment notes that while prior to 2007 walrus spent summers on sea ice in the Chukchi Sea, in 2010 walrus hauled out along the U.S. Chukchi coast. Also, a number of walrus used the Hanna Shoal area which is within the Lease Sale 193 area. The 2010 USGS study of walrus tracking and telemetry data is cited.
- Knowledge of the areas in the Chukchi sea that are crucial for life stages of marine mammals, especially in light of recent satellite telemetry data showing that movements of bowhead whales, beluga whales, walrus, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously anticipated.
- Knowledge of the distribution and timing of movements of beluga whales in the Chukchi Sea, including late summer distribution, fall-migration patterns, wintering areas, and areas that are particularly important for feeding.

This same comment went on to assert major inadequacies in the natural gas development and production analysis portion of the SEIS:

- Failure to provide sufficient analysis of the effects that constructing a gas pipeline from the offshore facility to shore could have on marine mammals. While the SEIS mentions that noise from construction could affect various species, it provides only a minimal description of the potential harm and unduly relies on avoidance and later processes to prevent harms.
- BOEMRE should perform a complete analysis of the potential effects of the construction of a natural gas pipeline that takes into account the locations of important marine mammal habitat and the cost of excluding animals from that habitat.
- Failure to sufficiently consider impacts to polar bears. The analysis fails to account for changes in the Arctic climate and ice extent and how this will affect polar bears, which may be more likely to become hungry, weak, or otherwise stressed. For instance, vessel and human-bear encounters (assumed in the SEIS to cause only minor disturbances to polar bears) may become more frequent and harmful.
- Failure to provide additional analysis of effects on walrus. BOEMRE's own analysis shows that human safety considerations may result in aircraft flying at an altitude that can

startle walrus and cause walrus mortalities. Since low-ceiling clouds in the Arctic prevent compliance with the minimum altitude requirements with some frequency, BOEMRE essentially ignores this potential harm. Also, BOEMRE states that vessels can cause walrus to abandon haulouts but does not further address the potential for such disturbance.

One comment stated that the analysis should explain how impacts to subsistence use and marine mammal populations will be mitigated throughout the oil spill cleanup process and afterward, so as to preserve subsistence hunting opportunities and maintain current marine mammal populations.

Another comment stated a need for more analysis on the probability of vessel strikes and the attendant threat marine mammals.

One comment calls “incorrect” the statements that noises from 160-170 dB appear to cause avoidance by certain whales. For support, the comment references previous MMS NEPA and IHA applications recognizing that avoidance responses can occur at 120 dB.

Finally, one comment suggests that a recent study demonstrated that adult bearded seals feed in areas adjacent to the lease area for a few months during the period when there is open water (and when development activities would be occurring). The comment notes:

- This study has a small sample size but, if extrapolated, demonstrates the importance of this area to marine mammals.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

Beluga and Noise. A number of studies of the effects of ship and industrial noise on beluga have been done, including studies on impacts to beluga in the heavily traveled St. Lawrence Seaway (Scheifele et al, 2002, 2003, 2004, Schneider 2004), studies using captive beluga (Erbe and Farmer 2003), studies of industrial noise and beluga in Cook Inlet (NMFS, ongoing studies) and studies on ice breaker noise and other industrial noises on the Beaufort Sea population of beluga in Canada (COSEWIC, recovery and management plans). This information is already incorporated into the Sale 193 FEIS and Final SEIS. BOEMRE is not aware of any data which would indicate that beluga in the Point Lay and Kotzebue Sound area would be affected differently from these other populations.

Sufficiency of Walrus and Beluga Information. Regarding the sufficiency of existing information in making reasoned choices among lease sale alternatives, the reader is referred to Appendix A of the Final SEIS which compiles the results of BOEMRE’s comprehensive 1502.22 analysis. Specific discussion of every item of incomplete information referenced in the Sale 193 FEIS is contained therein. Additional explanation of the state of the current science and its implications for resource management decisions is provided below. It is well understood that walrus habitat use is largely determined by the availability of sea ice in the Chukchi Sea. Walrus will remain with the ice as long as it does not move northward of the continental shelf. Walrus will take advantage of any remaining floes as late in the season as possible, before moving to terrestrial haulouts. The large number of walrus hauling out near Point Lay in the summer of 2010 provides a recent illustration of this phenomenon.

As required by NEPA, if a specific infrastructure is proposed, further evaluation of the potential impacts of that development will be assessed. At that time, BOEMRE will have more information

regarding any new terrestrial haul outs for walrus and can devise mitigation measures to avoid negative impacts to resources in these areas. The four-stage process applicable to OCS activities will allow BOEMRE to address any changes to walrus habitat anticipated to occur over time through Arctic warming.

Information on Habitat Preferences. Marine mammal habitat preferences are complicated; however, there is a great deal of information available on habitat preferences based upon water depth, season, ice type and ice coverage for all of the species mentioned. Recent tagging studies have furthered our knowledge base about speed and frequency of movements, and confirmed prior information about habitat preferences. Moreover, recent observations have confirmed our knowledge of established habitat preferences for walrus; the Revised Draft SEIS was modified to acknowledge this information. BOEMRE is confident that the Sale 193 FEIS and Final SEIS include sufficient information regarding marine mammal habitat preference upon which to make reasoned choices among lease sale alternatives. Recent studies assessing the variability of marine mammal movement confirm the current approach of deferring areas closer to the spring lead system (where there is a relatively well-defined migration corridor) but not other areas of the Chukchi Sea Program Area (which typically experience less concentrated and more variable use by marine mammals over the long-term).

BOEMRE has identified Hanna Shoal in the Sale 193 FEIS, the Final SEIS, and elsewhere as an area of importance to both walrus and gray whales at certain times of the year. There is sufficient information to inform the Secretary of the differences among alternatives so that he can make a well-reasoned decision. Additional research on bowhead, walrus, beluga, and seals, as well as fish species, benthic invertebrates, sea currents, temperature, salinity and other factors are underway, and will add additional detail. But this information is not anticipated to substantively change the baseline data already acquired.

Beluga Distribution. There is sufficient information available on the distribution and migration of beluga to make a reasoned decision among lease sale alternatives. For example, beluga use the spring lead system in their northward migration in spring and also use the Kasegaluk Lagoon area. This was one of the factors that led the Secretary to choose to defer a coastal corridor along the Chukchi Sea Planning Area from leasing.

Natural Gas Construction and Operation. The Final SEIS appropriately and sufficiently analyzes the effects of the construction and operation of an offshore pipeline resulting from natural gas development. The reader is reminded that effects from building a gas pipeline are not very different from the effects of building an oil pipeline. This activity was previously and thoroughly analyzed in the Sale 193 FEIS, which is summarized and incorporated by reference in the Final SEIS. Harm to marine mammals from construction of a gas or oil pipeline are limited to temporary disturbance due to noise and activity. It is possible that these activities will lead to some avoidance behavior, but significant impacts are not anticipated. Since gas/oil pipelines must be built in deep trenches to avoid the potential for ruptures from ice gauging, once the pipe is laid and recovered, that habitat is again available to benthic invertebrates, fish, and marine mammals. At this time, there are no production facilities or pipelines proposed in the Chukchi Sea. If a production facility or an oil or gas pipeline is proposed at a later date, additional analysis will take place at that point, which will include analysis of the precise proposed location. Mandatory adherence to MMPA (and for several species of marine mammals, ESA) regulations concerning take will further protect these animals if development occurs.

Vessel Strikes. The potential for vessel strikes to cause effects to marine mammals is analyzed in several portions of the Sale 193 FEIS and the Final SEIS. Additional language responding to comments regarding vessels strikes is provided in Issue Category 17. BOEMRE's analysis finds little likelihood for vessels associated with OCS activities to collide with marine mammals. The potential

for increased shipping in the Arctic is identified as a component of Arctic warming and analyzed in Section V of the Final SEIS, Cumulative Effects.

Polar Bears and Climate Change. Analysis of the impacts of climate change on polar bears is provided in the Sale 193 FEIS and expanded on greatly in the SEIS. Currently, most polar bears remain offshore on the pack ice, while some come ashore. Current predictions of changes in sea ice extent suggest that the open water season will continue to get longer, and more polar bears may come ashore to await the formation of sea ice in fall. All studies to date indicate that vessels (other than ice breakers) avoid large ice floes and very rarely occur in the vicinity of polar bears. Moreover, vessels operating in conjunction with OCS oil and gas activities are required to avoid any marine mammals by distances prescribed by FWS and NMFS. Polar bears appear to be indifferent to the presence of ice breakers and may either approach or ignore the vessels.

BOEMRE does not regulate onshore oil and gas facilities; therefore, we do not analyze them in our NEPA documents except as contributions to cumulative effects. However, BOEMRE is not aware of any research indicating that oil and gas facilities draw polar bears. Polar bears do occur in the oil and gas fields as they are moving through the area, usually in nearshore areas. To date, the FWS has developed a very robust program to reduce interactions between polar bears and oil and gas operations, and there have only been two polar bears killed in defense of human life in the oil fields in Alaska, one in 1968 and one in 1990.

Walrus. A thorough analysis of possible impacts to walrus, including the potential for disturbance via aircraft and vessels, is available in the Sale 193 FEIS and summarized and expanded upon in the SEIS. As this comment suggests, more in depth and site specific NEPA analysis correctly takes place when we have a specific proposal for an activity. It is true that aircraft overflights may result in disturbance events and also that aircraft flight routes and altitudes are largely unrestricted under Federal Aviation Administration (FAA) regulations. However, aircraft and helicopter flights that take place in conjunction with BOEMRE-regulated activities have specific guidelines in place which greatly reduce the likelihood of marine mammal disturbance events occurring. Flights are generally routed a mile or more inland to avoid shoreline areas where walrus may congregate. Aircraft associated with OCS activities must also fly at 1500 feet or more above ground level, except if human safety considerations require otherwise. Similarly, all vessels operating under BOEMRE regulations must have marine mammal observers on board and must avoid approaching marine mammals or causing any disturbance events. These restrictions do not apply to other vessels operating in the Arctic. The current level of analysis within the Sale 193 FEIS and SEIS is sufficient given the thorough identification of potential harms and the relatively small chance that they would actually occur.

Mitigating Adverse Impacts of Cleanup and Response Activities. The SEIS identifies this potential issue when it notes that “Overall, oil-spill-cleanup activities, far from providing mitigation, more likely should be viewed as additional impacts, potentially causing displacement of subsistence resources and subsistence hunters.” However, in the event of a spill, BOEMRE would not have primary authority over the cleanup process, and cannot guarantee that subsistence hunting opportunities would be preserved. The typical mitigation for animals in the event of a spill is recovery and cleanup of spilled oil. Responders will continue these efforts unless directed otherwise by the Federal On-Scene Coordinator (FOSC). It is possible that other hunting opportunities in unaffected areas may still occur.

Seals. The referenced marine mammal tracking study is being conducted through the BOEMRE Environmental Studies Program. As such, BOEMRE is keenly aware of these study results with radio-tagged bearded and ringed seals. A map associated with this study has been incorporated into the Final SEIS (Section III.B.6, Figure 9). The map generally reflects fewer bearded or ringed seal occurrences in and around the Lease Sale 193 area, than in most other areas of the Chukchi Sea. The

map depicts bearded seal locations mostly occurring south of Point Hope, while spotted seals were mostly detected off Point Lay, Wainwright, and Barrow, Alaska. Ringed seals were observed throughout the Beaufort and Chukchi Seas, however there were fewer occurrences in the Sale Area than in most other regions of the Chukchi and Beaufort Seas. In addition to ice seals, the map includes beluga and bowhead occurrences too. According to what is portrayed on this map, most ringed and bearded seal observations seem to occur between Kotzebue and Point Hope, indicating that the Sale Area does not have any noteworthy characteristics making it of particular importance to any of the ice seal species. This view is further supported by numerous surveys that have been conducted in the lease area over recent years (Brueggeman et al. 2010; Funk et al. 2010; Bles et al. 2010) that provide visual observations of marine mammals. Consequently the map confirms BOEMRE's analyses.

Effects of Noise on Whales. BOEMRE recognizes that some baleen whales avoidance response behaviors can occur at 120 dB re 1 μ Pa received sound levels (Richardson, et al. 1999), that a majority respond at higher received sound levels at around and above 160 dB re 1 μ Pa, and that some may not respond until received levels are louder still. The onset of behavioral disturbance from anthropogenic noise depends on both external factors (characteristics of noise sources and their paths) and the receiving animals (hearing, motivation, experience, activity, demography, etc.), which makes it difficult to predict (Southall et al. 2007). Currently, NMFS uses 160 dB re 1 μ Pa at received level for impulse noises (such as airgun pulses) as the onset of marine mammal behavioral harassment. The Final SEIS has been revised to better reflect the concerns raised in the comment.

Issue 20. Impacts on terrestrial mammals.

Summary of Comments

Several comments specific to caribou were received and asserted the following:

- The Chukchi Sea coastline is important to the Western Arctic caribou herd for calving and insect relief.
- There are deficiencies in the Draft SEIS natural gas development and production analysis of potential effects to caribou. It is recommended that the Final SEIS incorporate additional analysis of the potential for these activities to disturb caribou and suggested incorporating analysis from several BLM studies of these issues.
- It is important to mention that potential impacts to terrestrial-mammal populations are tied primarily to the development and production stages of oil and gas activity. Exploration efforts are conducted offshore and do not include pipeline construction, ice roads, gravel roads, or permanent onshore facilities.
- The statement that terrestrial mammals will be displaced by 4 km of pipelines and roads is unsupported in the Draft SEIS. It appears that the distance identified in literature for avoidance of roads by caribou cows with calves (by Cameron in 2005) has been applied more broadly than the scientific data and literature support.
- BOEMRE should reference the ADF&G census of caribou herds, and in particular the Central Arctic herd, because it is the main herd that occupies and migrates through the North Slope oilfields annually. Since the beginning of tracking these animals in the 1970s their numbers have been up and down, most recently on an uptrend to 60,000 animals in 2008.

One comment contained a lengthy critique of BOEMRE's analysis of effects from the construction and operation of pipelines. This comment focused largely on impacts to caribou. Specific concerns in this comment were asserted as follows:

- The 193 FEIS analysis of an oil pipeline does not provide the necessary analysis of the effects of a gas pipeline.
- The Draft SEIS provides no more than a cursory and incomplete analysis of the effects of the construction and operation of a gas pipeline.
- Even if the gas pipeline travels the same corridor as the oil pipeline discussed in the 193 FEIS, a second pipeline and additional compression facilities and maintenance activities will result in other effects, both individually and cumulatively with oil-related activities.
- Instead of providing a detailed analysis, the draft SEIS relies on later analyses and permitting processes to identify and prevent environmental harms.
- Information about the biological resources of an area and the effects of oil and gas activities on those resources is essential at the lease sale stage because it is at this stage that the agency has discretion to determine if, when, where, and how oil and gas activities may occur in a planning area. At later stages, the agency will already be invested in particular courses of action, and its discretion may be more constrained.
- In recent Integrate Activity Plan/EIS documents for the National Petroleum Reserve-Alaska (NPR-A), BLM identified numerous potential adverse effects of onshore pipelines to caribou. The BOEMRE analysis and conclusions in the SEIS are contrary to BLM's.
- The BOEMRE analysis and conclusions in the SEIS are contrary to the National Research Council's Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope (2003).

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- General Public

Response to Comments

Caribou. The potential for natural gas development and production activities to impact the Western Arctic caribou herd (WAH) is analyzed in Section IV.C.11 of the SEIS. Background information on the distribution and habits of the WAH (including discussion of areas used for insect relief and calving) is provided in Section III.B.7 of the SEIS. The very thorough discussion of these issues provided in Section III.B.7 of the Sale 193 FEIS is summarized and incorporated by reference in the SEIS.

The potential for an onshore gas pipeline and other natural gas development and production activities to impact caribou is discussed in Section IV.C.11 of the SEIS. Analysis of cumulative effects to caribou is provided in Section V.B.9 of the SEIS. As is explained in the SEIS, any overland gas pipeline construction would occur after the construction of an overland oil pipeline from the Chukchi coast to the TAPS. Consequently, the gas pipeline would use the existing oil pipeline right-of-way and disturbance area. The resulting effects from constructing a gas pipeline would be additive to those of an oil pipeline, albeit much less than the initial perturbation created by constructing an oil pipeline. Thorough analysis of the potential effects of an oil pipeline on caribou is available in Section IV.C.1.i of the Sale 193 FEIS. This analysis is summarized and incorporated by reference in the SEIS, providing context for the natural gas analysis and conclusions.

The referenced BLM studies are consistent with and in many cases confirm the analysis and conclusions of the Sale 193 FEIS and SEIS. Each of these documents acknowledges that caribou tend to avoid areas of intense activities, especially during the calving period, and that the zone of disturbance extends up to 2.4 miles from the road or construction area.

Despite the construction of several pipelines across calving grounds for the Central Arctic Herd (CAH), the herd has increased in number in the decades since the pipelines were constructed. The upward trend of CAH caribou may be indicative of a lack of lasting adverse effects from pipeline construction in the Prudhoe Bay project area and the surrounding fields.

Impacts of Development and Production. The SEIS acknowledges that potential impacts on terrestrial-mammal populations are tied primarily to the development and production stages of oil and gas activity (Final SEIS, Section II.D.1, Terrestrial Mammals):

The primary potential effects of OCS exploration and development activities on terrestrial mammals would come from disturbance associated with ice-road and air-support traffic along pipeline corridors and near other onshore support facilities. Habitat alteration associated with gravel extraction (mining) to support the construction of offshore gravel islands and gravel pads for onshore facilities is possible. Effects could also come from potential oil spills contacting coastal areas used by caribou for insect relief, and for scavenging by grizzly bears and arctic foxes...

These statements specifically present the relevant effecters that could be expected to impact terrestrial mammals. This includes the potential for spills, and air traffic which may support exploration activity and development activity.

Displacement. The statement that terrestrial mammals will be displaced 4 km from pipelines and roads is supported by Cameron et al. (1992, 2005 cited in Joly et al., 2006), summarizing that caribou reduced their use of a 0-4 km zone around a road after its construction while increasing their use of a 4-6 km zone from the road, and may have some level of adaptability to oilfield developments if mitigations are implemented (Haskell et al. 2006). These references were added to the Revised Draft SEIS text, and the ADF&G caribou population surveys have also been incorporated and cited in the SEIS.

The SEIS appropriately and sufficiently analyzes the effects of the construction and operation of an overland pipeline resulting from natural gas development. The potential effects from the construction and operation of the oil pipeline across NPR-A are thoroughly analyzed in the Sale 193 FEIS; that analysis is incorporated in the SEIS by reference. Although the resulting effects from constructing a gas pipeline would be additive to those of the oil pipeline, they would be much less than the initial perturbation created by the earlier construction the oil pipeline. The effects of constructing and operating the gas pipeline would be very similar to and less than the effects associated with constructing and operating the oil pipeline.

Regulatory Agencies. A gas pipeline across NPR-A would be permitted and regulated by other federal agencies including BLM and the U.S. Army Corps of Engineers. The Sale 193 FEIS and SEIS assume that other federal agencies will appropriately fulfill their responsibilities. It is unknown what the requirements and mitigation measures will be 30 years hence; therefore, the Sale 193 FEIS and SEIS assume that the current requirements would be the minimum environmental protection level for future overland pipelines.

OCS Lands Act – Four Stage Process. The OCS Lands Act created a four-stage process for planning, leasing, exploration, and production of oil and gas resources in federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner.

The amount and detail of the information needed for a NEPA analysis depends upon the decision it is intended to support. A lease sale EIS provides an areawide-level analysis that is appropriate for to support a decision on configuration and requirements of an areawide-lease sale. In compliance with OCS Lands Act and DOI policy in 516 DM 15, BOEMRE conducts technical and environmental review on each exploration and development and production plan. BOEMRE completes a site-

specific NEPA review as appropriate at the exploration or development and production stage when specific and more detailed regional information is required and the location (site), timing, and proposed activities are known. Decisions on each proposed action resulting from Lease Sale 193 are based on the best available scientific information from proposal-specific technical and environmental reviews.

Effects on Caribou. The most current BLM document (BLM, 2008) stated:

Ground observations of caribou within the Kuparuk area from 1978 to 1990 indicated that caribou increasingly avoided zones of intense activity, especially during the calving period (Smith et al. 1994). Lawhead et al. (2004) reported that maternal caribou with calves were displaced from areas near both the Tarn and Meltwater roads during calving and up to two weeks post calving. Very few calves were observed within 1.2 miles of either road during the calving period and densities appeared to be reduced as far away as 2.4 miles. Traffic convoying on the Meltwater road was not effective at reducing calving displacement to less than 1.2 to 2.4 miles, or reducing the disturbance reactions of caribou within 1,640 feet of the road. Data analyzed by Cameron et al. (2002) suggested that having roads too closely spaced would displace calving activity within the oil field complex. Other studies (Roby 1978; Cameron et al. 1981, 1983, 1992; Pollard and Ballard 1993) and literature reviews (Cronin et al. 1994, 1998) indicate some seasonal avoidance of habitats within three miles of existing Prudhoe Bay area facilities by cows and calves during calving and early post-calving periods (May through June).

The WAH and CAH caribou core calving ranges lie outside of the planning area, while the TLH caribou calving area is concentrated in the northern section of the planning area near Teshekpuk Lake.

In other words, caribou tended to avoid areas of intense activity, especially during the calving period and the zone of disturbance extended up to 2.4 miles from the road or construction area.

Despite the construction of several pipelines across calving grounds for the CAH, the herd has increased in number in the decades since those pipelines were constructed. The upward population trend of CAH caribou may be indicative of a lack of lasting adverse effects from pipeline construction in the Prudhoe Bay project and the surrounding oil fields.

BLM's statement that "there could be reproductive consequences from extensive disruption of caribou [movement] during the insect-relief season" is not contrary to BOEMRE's statements in the 193 Draft SEIS at p. 90 and the 193 Revised Draft SEIS at p. 108:

Research has suggested that caribou in arctic Alaska generally avoid areas within 4 km of oil-field roads after they are constructed (Cameron et al., 1992; Joly, Nellemann, and Vistness, 2006). However, avoidance is not absolute and caribou may habituate to infrastructure and human activity (Haskell et al., 2006).

The construction of roads and gravel pads may provide caribou with additional insect-relief habitat, particularly when there is little or no road traffic present. Conversely, the construction of roads and pipelines could provide vectors by which invasive species, parasites and new diseases could be introduced into the arctic environment (Kutz et al., 2004; Urban, 2006).

Caribou are somewhat tolerant of development and can habituate to developed landscapes. This is discussed in the SEIS, Section IV.C.11. BLM analyses generally support the conclusions of the SEIS, and are cited appropriately.

The SEIS acknowledges minimum height requirements for elevated pipelines (emphasis added):

Caribou successfully cross under pipelines that are elevated a minimum of 7 ft above the tundra, a requirement for onshore pipelines in the NPR-A (USDOI, BLM, 2006). Pipelines without adjacent roads and vehicle traffic are not likely to affect caribou movements"... (SEIS, IV.C.11)

BOEMRE analysts have reviewed the National Research Council's Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope (2003) and incorporated and considered the information therein as appropriate. In relation to the potential effects to caribou from onshore oil and gas activities, the NRC report states:

The decrease in herd size between 1992 and 1995 may reflect the additive effects of surface development and relatively high insect activity, in contrast to an increased in the herd's size from 1995 to 2000, when insect activity was generally low... (NRC 2003, p 116)

The calving grounds for the TLJ are located within the Teshekpuk Lake Special Management Area portion of NPR-A. Approval of a pipeline corridor through this protected area is not reasonably foreseeable in light of the area's special status and abundance of wildlife, the ongoing attempts to permanently exclude the area from any oil and gas development activities, and the heightened engineering difficulties. The WAH and CAH calving areas lie outside of what could be considered viable pipeline corridors (BLM 2003; BLM 2008). Consequently, no caribou calving areas are expected to be disturbed by the presence or construction of an OCS-related natural gas pipelines.

Issue 21. Economy, employment, and demographics.

Summary of Comments

Many comments focused on the potential economic impacts of the Lease Sale 193. These comments discussed positive and negative impacts on local, regional, state, and national scales:

- Regarding positive local and regional impacts, Lease Sale 193 would lead to large economic benefits for the North Slope and its villages through increased jobs and revenues such as taxes. North Slope Borough has benefitted greatly from higher tax revenues resulting from oil and gas activities (in the Prudhoe Bay area), and petroleum revenues have enabled more services and better schools. The North Slope Borough population is growing, and this growth will require additional funding. Offshore activities would help create more jobs in the villages and would encourage younger generations to stay in or return to North Slope communities.
- Regarding negative impacts, incentivizing offshore development decreases the chances that local government can derive tax proceeds; actual opportunities for Natives in the North Slope oil and gas industry have been limited in terms of employment rates as well as job positions; and environmental impacts of leasing may diminish Arctic tourism values.
- Offshore activities, including potential activities stemming from Lease Sale 193, are important to Alaska and its economy. Many such comments cited a 2009 study by Northern Economics Inc. and the University of Alaska, which found that new offshore energy in Alaska would produce an average of 35,000 jobs—both directly and indirectly generated by increased offshore production—over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.
- Another frequently cited study by Northern Economics and the University of Alaska estimates an annual average of 54,700 new jobs would be created and sustained through the year 2057 from the Alaska OCS, with 68,600 during production and 91,500 at peak employment. Total payroll through that time would be \$145 billion (\$63 billion to employees in Alaska and \$82 to employees in the rest of the U.S.). Roughly, \$193 billion in government revenue would be generated (\$167 to the Federal government, \$15 billion to the State of Alaska, \$4 billion to local Alaska governments, and \$6.5 billion to other state governments).
- The oil and gas industry is extremely important in the State of Alaska, accounting for more than 41,000 jobs (which equates to 9.4 percent of employment and 11.2 percent of wages).
- Development of the OCS would generate approximately \$5.8 billion in additional state and local revenues.
- Moving forward with OCS development would: maximize the value of resources under agencies' management; enhance the real option value of TAPS and other critical

infrastructure; reduce regulatory uncertainty, which is destroying resource value; and set high standards for developing the Arctic.

- There could be dire impacts to the Alaska economy in the event that the lease sale is not affirmed:
 - Chukchi Sea resources are essential to keeping the Trans Alaska Pipeline System at operational capacity.
 - If the TAPS goes away, there is no North Slope economy.
 - Delay of the lease sale process jeopardizes hundreds of jobs and contracts for local Alaskans.
 - Uncertainty regarding oil and gas activities in the Alaska OCS discourages continued investment.
 - Lack of access to resources keeps Alaska dependent on the federal money.
- The jobs figures (quoted by other commenters) are misleading: only a fraction of the jobs would be the direct oil industry positions implied, and it is likely that many of those slots would be filled by workers not now residing in Alaska.
- The federal government should share a portion of the proceeds from any development with the State of Alaska through revenue sharing.
- Regarding national issues, the energy sector is very important to the domestic economy, and new offshore development in Alaska's Chukchi Sea would help stimulate America's economic recovery by generating thousands of new, high-paying jobs (in industries from steel and pipe manufacturing to shipping to computer technology) throughout the 50 states.
- Renewable energy is an emerging industry that can provide good jobs for workers currently in the oil and gas industry, as well as others.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Overall, Chukchi Sea exploration, development, and production will contribute to the large role that petroleum plays in the Alaskan economy, creating jobs directly and indirectly, through revenues accruing to state and local governments, and through state savings accounts established with oil revenues. Increased revenue, employment, and personal income provide new opportunities and an increased capacity for local governments to meet public services needs and improve the quality of life for local residents. A more diversified economy can help offset the emigration of population from rural areas (caused predominantly by the pursuit of economic and education opportunities in urban areas) and help local governments address fundamental aspects of quality of life, such as maintaining traditional culture and subsistence lifestyles, while also providing for human health, public safety, education, and public sanitation.

Job Creation. The Sale 193 FEIS as well as the SEIS (in particular Section IV.C.13) found that oil and gas exploration, development, and production activities within the Alaska OCS would indeed create jobs and many economic benefits for the U.S. economy, the State of Alaska, the North Slope

region and various governmental entities. BOEMRE analysts have reviewed the referenced Northern Economics Inc. and University of Alaska (UAA) study and found it to be a thorough analysis of the potential economic effects if OCS oil and gas development and production occurred in offshore Alaska. Because the UAA study analyzes a different development scenario than does the SEIS, and because the employment numbers reflect assumptions of activities in several other planning areas outside the Chukchi Sea, its conclusions regarding net job growth and payroll are not incorporated into the SEIS.

Increases in employment from OCS activities could more than offset employment losses from declining production on State lands. While a relatively small share of the direct jobs are expected to be taken by local residents, most of the infrastructure, government, and support jobs are expected to be taken by local residents. The proposed sale will also help extend the life span of TAPS, which BOEMRE recognizes as critical to the State and local economy. Prolonging the lifespan of TAPS would generate employment opportunities in a wide array of industries throughout the State.

New Revenues. Any OCS development resulting from the proposed sale will generate state and local revenues in several ways: (1) direct revenues from property and corporate income taxes, (2) sharing of lease revenues with the Federal Government (e.g., coastal impact assistance, states' share from offshore leases [section 8(g) revenues], etc.), (3) revenues from taxes and fees paid by those working directly in OCS-related jobs and those working in businesses that support OCS activity; and (4) revenues from taxes and fees paid by non-OCS petroleum activities. The SEIS projects approximately \$90 million of NSB property tax revenue over the depreciable life of the shore based gas support facilities and overland pipeline. This calculation used a straight line depreciation rate of 12.5% per year over 8 years. Calculating depreciation over the useful life of the asset would likely result in even larger revenues. A note to this effect has been inserted into the SEIS.

No Action. The economic benefits delayed or lost under the No Action Alternative would particularly affect the State and local governments in Alaska. For example, assuming the lost production of 1 billion barrels that could be sold at current prices of \$80/barrel represents a loss in gross income of \$80 billion. Infrastructure costs could be \$10 billion, with much of this amount spent in Alaska for materials and labor. Gas production of 2.25 Tcf sold at \$5/Mcf represent a loss in gross income of another \$11.25 billion. A project lasting nearly 50 years could substantially benefit the local and State economy.

Renewable Energy. Issues pertaining to the economic impacts from renewable energy development are important, but exceed the scope of analysis in the Final SEIS.

Issue 22. Responsibilities to the Arctic people and environment.

Summary of Comments

Many comments addressed BOEMRE's responsibilities to the Arctic people and environment. These comments focused on the following themes:

- The Draft SEIS does not satisfy BOEMRE's obligation to protect America's Arctic; BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean.
- BOEMRE must not allow drilling to go forward unless it has the scientific knowledge to say that drilling is safe, and/or until a properly funded department is formed and comes up with solutions to all possible accidents.
- The Clean Water Act and Clean Air Act charge the government with a Public Trust Doctrine and a Tribal Trust Doctrine. It is a shame that Native people are forced to use the courts to ensure that laws are upheld.

Several comments expressed the desire to be involved in decisions that affect the Native way of life:

- The people of the Arctic need to be involved in all of these decisions to protect their way of life.
- Arctic people need to have a seat at the table to improve decisions. So far, communication, partnership, and providing information have made a change.
- “I love being Iñupiat. I love our food, our way of life, our circle of life, our land and sea.” This commenter expressed the need to be involved and to make sure everything is done right.

Several commenters stated that the SEIS was written by people in Washington, D.C who have never lived in the Arctic.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- General Public

Response to Comments

BOEMRE takes seriously each of its responsibilities, which include offshore energy and mineral resource development, as well as protecting human safety and environmental and cultural resources. Safety and protection of environmental and cultural resources continue to be a paramount concern for BOEMRE.

No Decision to Drill. No decision on drilling will be made during this SEIS process. The SEIS uses best available information to analyze reasonably foreseeable environmental effects. The SEIS also models and analyzes the potential impacts on the environment of a low probability, high impacts event. But a decision on whether to go forward with drilling or other exploration activities in light of these risks is beyond the scope of the Final SEIS. If a lessee submits a specific proposal to drill at a later date, BOEMRE would then conduct a full technical and environmental review of that site-, time-, and project-specific proposal, incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would also be developed and required at that time. The purpose of this Final SEIS is to inform the Secretary’s decision whether or not to reaffirm, modify, or cancel Lease Sale 193.

Regulatory Agencies. In the Arctic OCS, the U.S. Environmental Protection Agency (EPA) regulates compliance with the Clean Water Act and the Clean Air Act. BOEMRE manages the OCS Program as established by the OCS Lands Act. One of BOEMRE’s responsibilities is to ensure that OCS activities comply with applicable environmental laws. To that end, BOEMRE places “conditions of approval” on OCS activity authorizations stating that activities cannot begin until the appropriate Clean Water Act and Clean Air Act permits (if applicable) are obtained from the EPA.

Opportunities for Involvement. BOEMRE has invited for many years the people of the Arctic to be involved in agency decisions. BOEMRE has requested involvement through informational meetings, scoping meetings, meetings with community leaders, public hearings on environmental documents, and government-to-government consultations with tribal leaders. Additional information regarding the public outreach processes for the Draft SEIS and Revised Draft SEIS are provided in Issue Category 2.

BOEMRE Alaska Region welcomes suggestions to improving the sharing of information and communication between the agency and people in Alaska communities.

Authors' Familiarity with Arctic. The Draft SEIS, Revised Draft SEIS, and Final SEIS for Chukchi Sea Lease Sale 193 were written by BOEMRE analysts of the Alaska OCS Region in Anchorage, Alaska. Many of these analysts have lived in Alaska for many years. When considering environmental impacts to the resources in the Arctic, these analysts are considered subject matter experts by the agency.

Issue 23. Impacts on subsistence.

Summary of Comments

BOEMRE received many comments focused on the myriad benefits of subsistence, as well as the many direct, indirect, and cumulative effects that could occur if subsistence activities are curtailed. These issues were a central concern at public meetings. Notable points included:

- There is a lack of understanding among federal decision makers regarding life in the village and subsistence.
- Residents have a wealth of information to share regarding animal movements, etc. but they are rarely asked or listened to.
- Subsistence resources are so vital to our well being that if the health of the ocean deteriorates so will the physical health of our people. In the North Slope communities, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food.
- Native people do not always like to eat Western foods. Subsistence foods are irreplaceable, and their loss would cause suffering.
- Even with this increasingly mixed economy, subsistence hunting continues to provide 40% of caloric intake for Iñupiat Eskimos on the North Slope, with substantially higher percentages in the more rural villages.
- Arctic Ocean subsistence resources not only provide food but are also fundamental to the peoples' identity.
- Interference in subsistence activities and/or decrease in subsistence foods also cause social impacts.
- Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.
- Pollution and/or disturbance in one portion of the Arctic may push whalers into other areas, creating or increasing competition for resources.
- There is no effective means to compensate for the loss of subsistence resources. Western foods are cost prohibitive and lead to increased rates of diabetes and other health issues as compared with traditional foods.
- Disruption of subsistence activities can endanger participants as well as decrease the likelihood of success.
- Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness – it gambles our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences.
- I would rather pay \$50 for a gallon of gas than worry about not being able to go hunting and get the food that I need.
- Observations of sick and diseased animals have increased in recent years.

Some comments stressed the need for money (for supplies, equipment, fuel, etc.) to engage in subsistence activities. It was noted that a balanced approach between traditional subsistence lifestyle and economic development is important because communities no longer function in an isolated barter economy or rely totally on subsistence. Such comments stressed the following:

- The influx of money from development makes people reliant on modern technology and spoils the Native way of life.
- Subsistence-use areas have been expanding as technology improves, such that a 25-mile corridor is not sufficient to protect current use areas and avoid disturbance of subsistence areas.
- Native people cannot survive on muktuk and seal anymore. There is a need for hamburger. Children are already used to that. We also need money to use modern-day equipment for acquiring subsistence foods.

One comment requested that BOEMRE be more explicit about MMPA's protections with respect to subsistence. The comment asserts:

- BOEMRE should assess potential impacts against the MMPA requirements.
- BOEMRE should specifically identify how mitigation will reduce impacts (including impacts from seismic activities) to a level that does not violate the MMPA.

Several commenters noted that Wainwright engaged in a successful bowhead hunt during the fall of 2010, rendering certain statements in the Revised Draft SEIS obsolete. Also, several commenters asserted that the agency should consider the potential for ship movements to affect winter bowhead whale hunting off St. Lawrence Island.

One comment specifically asserts that BOEMRE fails to adequately analyze the potential for gas development and production activities to displace subsistence users. This comment asserts the following:

- The Draft SEIS's analysis of effects on subsistence-harvest patterns is largely focused on the potential for activities to restrict access to resources through reductions in the resources themselves or changes in the distribution of those resources.
- The Final SEIS should additionally analyze the potential that large scale natural gas development and production could displace subsistence users (via lack of cultural privacy, belief that resources are contaminated, reduced resource productivity, and physical obstacles) from vast expanses of this region.

One comment requested Section III.B.4 explain, based on historical accounts, that subsistence hunts for bowhead whale do not occur more than 20 miles from the coast. Also, most of the bowhead harvest occurs during spring migration as whales follow ice parallel to the coast line. This same comments characterized the current deferral area, along with applicable mitigation measures, as providing ample protection to marine mammals and subsistence activities.

Several comments also criticized the significance threshold used in the SEIS in evaluating potential impacts to subsistence activities. These comments are addressed under the Issue 13 - Significance thresholds.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups

- General Public

Response to Comments

BOEMRE acknowledges the pivotal importance of subsistence food and subsistence practices to the indigenous people of the North Slope and the Northwest Arctic boroughs. The Sale 193 FEIS contains a very thorough discussion of the broad importance of subsistence. The Final SEIS summarizes and incorporates by reference the information and analysis in the Sale 193 FEIS. The Final SEIS specifically acknowledges the important of subsistence and addresses potential impacts within various sections addressing Subsistence-Harvest Patterns, Sociocultural Systems, and Environmental Justice.

BOEMRE is committed to protecting subsistence activities. The BOEMRE Alaska Region has adopted, through regulatory practice, a position on significance in the context of NEPA that supports the goal of protecting subsistence activities. This position is clearly aligned with the way BOEMRE regulates offshore oil and gas geophysical and geological surveys and exploratory drilling activities. The predominate attribute of this regulatory policy makes clear that BOEMRE will only permit offshore oil and gas activities when the disruption to subsistence harvest of resource can be minimized in such a manner that the disruption is short term and as a result of incidental or accidental encounters.

Traditional Ecological Knowledge. BOEMRE agrees that traditional and local knowledge are rich sources for information in the Chukchi Sea region and it is our policy to use research, exchanges with local governments and tribal organizations, and public meetings to continue to update what we know. Since 1995, Traditional Ecological Knowledge (TEK) has been incorporated into the lease sale analysis process by including Iñupiat observations into the text of the EIS analyses. Indigenous speakers are cited in text and in the bibliography. In addition to other available published TEK sources, TEK has been solicited from Iñupiat sources that included past and more recent testimony from community meetings conducted for lease-sale hearings. Indigenous public comment in the form of 25 years of lease-sale hearings in the Alaskan Arctic has been posted on the Alaska OCS Region website at <http://www.boemre.gov/alaska/ref/PublicHearingsArctic/PublicHearings.htm>.

BOEMRE considers TEK in lease-sale and project planning, in determining deferral areas, in EIS analyses, in the formulation of new mitigation measures, in the drafting of new scientific studies, and in decision making. Also posted on the Alaska OCS Region website is a discussion of how TEK is used in the OCS decision process (http://www.boemre.gov/alaska/native/tradknow/tk_mms2.htm). The Deferral Alternative III, Corridor I for Chukchi Sea Lease Sale 193, was developed in direct response to TEK and more recent comments by bowhead whale subsistence hunters to protect important bowhead whale habitat used for migration, feeding, nursing of calves, and breeding. BOEMRE will continue to consider TEK in future environmental analyses and welcomes any additional TEK that readers can provide.

BOEMRE Studies and Reports. The Alaska OCS Region promotes studies that directly address the standing issues and concerns of Native stakeholders. BOEMRE involves local and tribal governments in its studies planning process and has held meetings in all local communities to assist their involvement in this effort. BOEMRE's participation in the North Slope Science Initiative ensures our continued involvement in Slope-wide scientific research formulation and coordination.

Particular studies that BOEMRE has funded to address sociocultural and environmental justice impacts include the following (each of which is available at <http://alaska.boemre.gov/reports/2002rpts/akpubs02.htm>):

- MMS 2009-003. *Subsistence Mapping of Nuiqsut, Kaktovik, and Barrow*. 2009.

- MMS 2002-012. *Bowhead Whale Feeding in the Eastern Alaskan Beaufort Sea: Update of Scientific and Traditional Information*. 2002. Conducted out of the village of Kaktovik, and includes local Iñupiat in the study design, data gathering, and data analysis.
- BOEMRE 2010-032. *Arctic Nearshore Impact Monitoring In Development Areas (ANIMIDA)*. Designed specifically to meet requests from the Iñupiat community and its follow-up study: *Continuation of Arctic Nearshore Impact Monitoring in Development Areas (CANIMIDA)*.
- MMS 2007-062. *Quantitative Description of Potential Impacts of OCS Activities on Bowhead Whale Hunting/Subsistence Activities in the Beaufort Sea*. 2007.
- MMS 2002-027. *The Alaska Frozen Tissue Collection: A Resource for Marine Biotechnology, Phase II*. 2002.
- MMS 2006-020. *North Slope Economy, 1965 to Present*. 2006.
- MMS 2002-071. *GIS Geospatial Database of Oil-Industry and Other Human Activity (1979-1999) in the Alaskan Beaufort Sea, Volume 1*. 2002.
- MMS 2005-033. *Analysis of Covariance of Fall Migrations of Bowhead Whales in Relations to Human Activities and Environmental Factors, Alaskan Beaufort Sea: Phase 1 (1996-98)*. 2005.
- MMS 2009-030. *Researching Technical Dialogue with Alaskan Coastal Communities: Analysis of the Social, Cultural, Linguistic, and Institutional Parameters of Public/Agency Communication Patterns*. 2009.
- MMS 2007-042. *Variation in the Abundance of Arctic Cisco in the Colville River: Analysis of Existing Data and Local Knowledge*. 2007.
- MMS 2008-002. *Bowhead Whale Abundance Through Photographic Analysis: Data Analysis Support by Minerals Management Service*. 2008.
- MMS 2005-035. *Distribution and Movements of Beluga Whales from the Eastern Chukchi Sea Stock During Summer and Early Autumn*. 2005.
- MMS 2006-003. *Development of Airborne Remote Sensing Methods for Surveys of Pacific Walruses*. 2006.

There are also ongoing studies funded by BOEMRE and addressing sociocultural impacts and impacts related to environmental justice (available at http://alaska.boemre.gov/ess/ongoingStudies/Ongoing_studies.pdf):

- AK-05-04a. *Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska*.
- AK-07-01. *Monitoring the Distribution of Arctic Whales*.
- AK-08-09. *Aggregate Effects Research and Environmental Mitigation Monitoring of Oil Industry Operations in the Vicinity of Nuiqsit*.
- AK-08-01. *Continuation of Impact Assessment for Cross Island Whaling Activities*.
- AK-12-04. *Subsistence Use and Knowledge of Beaufort Salmon Populations*.
- AK-08-04. *COMIDA: Impact Monitoring for Offshore Subsistence Hunting*.
- AK-03-12. *Social and Economic Assessment of Major Oil-Spill Litigation Settlement for the Alaska OCS Region*.
- AK-07-01. *Subsistence Study for North Aleutian Basin*.

A TEK-specific subsistence report, *Passing on the Knowledge: Mapping Human Ecology in Wainwright, Alaska* (Kassam and Wainwright Traditional Council, 2001) was used in the

subsistence-harvest pattern analysis for the Chukchi Sea Lease Sale 193 FEIS. The recent study *Subsistence Mapping at Nuiqsut, Kaktovik, Barrow, and Wainwright: Past and Present Comparison* incorporates local TEK and maps geographic patterns of subsistence use near these communities. This comparative time-series information will be used to assess cumulative sociocultural impacts of OCS activities in the Chukchi and Beaufort seas regions.

Mitigations. Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Lease Sale 193, as held in February 2008, included Stipulation No. 5 – Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvest Activities. A discussion of this lease stipulation is provided in Section II.B.3.c(1) of the Sale 193 FEIS. This lease stipulation is incorporated by reference in the Final SEIS per Section II.C.1. Conflict avoidance measures are also required by NMFS and FWS under the MMPA. The MMPA requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

Meanwhile, the Department of the Interior is taking affirmative steps to increase the safety of OCS activities. On January 19, 2011, the Secretary of the Interior and the Director of BOEMRE announced the formation of the Ocean Energy Safety Advisory Committee (OESC). The OESC is a 15 member public federal advisory body composed of the nation’s leading scientific, engineering and technical experts. The OESC is comprised of representatives from federal agencies—including BOEMRE, the Department of Energy, the National Ocean and Atmospheric Administration, the United States Geological Survey, the Environmental Protection Agency, and the United States Coast Guard—as well as the offshore oil and gas industry, academic institutions, and other non-governmental organizations. The group advises the Secretary, through the BOEMRE Director, on matters and actions relating to offshore energy safety, including drilling and workplace safety, blowout containment and spill response. The OESC will be a center of excellence charged with driving research and development and technical innovation across government and industry in the areas of drilling safety, well control and subsea containment, and oil spill response. The OESC is the first step toward establishing the proposed Ocean Energy Safety Institute, which would facilitate collaborative research and development, training and execution in these and other areas relating to offshore energy safety going forward. The OESC will provide advice on how best to stand up the Institute, and on what role OESC should play in the Institute. Further information about OESC is available at: <http://www.boemre.gov/mmab/EnergySafety.htm>.

OCS Lands Act – Four Stage Review Process. The OCS Lands Act created a four-stage review process for planning, leasing, exploration, and production of oil and gas resources in federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner (*Sierra Club v. Morton*, 510 F.2d 813, 828 [5th Cir.1975]). BOEMRE expects that additional information obtained through exploration seismic surveys and drilling, environmental studies, monitoring of activities, and technological research in the Arctic OCS will increase our knowledge of the environment and support continued improvement in avoiding and minimizing adverse effects from OCS operations. If an exploration or development and production plan is submitted, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Site-specific information provides opportunity for more detailed analysis and mitigation.

MMPA Requirements. Consistent with standard NEPA practice, potential impacts to subsistence are measured against a significance threshold that is specifically designed to measure the context and severity of potential impacts to that resource. Subsistence-related provisions of the MMPA, meanwhile, are regulated by NMFS. Further discussion of the significance threshold specific to subsistence harvest patterns is provided within Issue Category 13 of this Appendix.

Natural Gas Production and Development. Onshore support facilities related to OCS natural gas production are expected to be co-located with existing infrastructure. Permitting of a pipeline across NPR-A would be under BLM jurisdiction. For additional information on BLM's mitigation for the protection of subsistence activities, the reader is referred to the BLM's NPR-A Integrated Activity Plans/EISs (http://www.blm.gov/ak/st/en/prog/planning/npra_general.html). BOEMRE takes seriously consideration of local concerns about social impacts resulting from disruption or interference with subsistence activities or decreases in subsistence foods. Accordingly, the Final SEIS, Section V.B.15, Environmental Justice Cumulative Effects, states the following:

Onshore oil and gas development, especially potential road development within NPR-A and Alpine satellite field expansion, could impact subsistence resources and harvest practices. Subsistence resources, particularly caribou, could experience long-term disturbance and displacement effects, as well as functional loss of habitat and potential population reductions, causing subsistence hunters to alter traditional harvest practices by having to travel to unfamiliar areas. If this occurred, long-term displacement of ongoing social systems would be expected. Community activities and traditional practices for harvesting, sharing, and processing subsistence resources would be altered, and disproportionate, high, adverse effects would be expected for the Iñupiat communities of Barrow, Wainwright, Point Lay, and possibly Point Hope.

Additional discussion on this issue is in the SEIS in Sections: II.C.1 Mitigation Measures, Conflict Avoidance Stipulation; and II.C.2 Issues.

Displacement. In preparing the Sale 193 FEIS and Final SEIS analyses of potential subsistence impacts, BOEMRE analysts thoroughly considered several factors that could lead to displacement of subsistence activities, including but not limited to a lack of cultural privacy, belief that resources are contaminated, reduced resource productivity, and physical obstacles. These efforts are apparent in the text of each document. In the Final SEIS, "displacement of subsistence users" is discussed in Sections II.D.1, IV.A.1, IV.C.15, IV.C.17, V.B.12, and V.B.15. "Lack of cultural privacy" (assumed to refer to increased non-Native presence and hunting competition) is discussed in Final SEIS Section V.B.12. "Belief that resources are contaminated" is discussed in Final SEIS Sections IV.C.17, V.A.2, V.B.12, and V.B.15. The potential for "reduced resource productivity" is addressed in Final SEIS Section V.B.12. "Physical obstacles" are addressed in V.B.12. The Sale 193 FEIS contains much discussion of these issues in the analogous context of an oil pipeline across NPR-A—the Sale 193 FEIS is incorporated by reference into the Final SEIS.

Oil Spills. Concerns regarding impacts that could occur during an oil spill are addressed under the topic of Impacts on Environmental Justice and Human Health. Safety and prevention of pollution, including accidental oil spills, are the primary focus of BOEMRE OCS operating regulations. These regulations require operators that engage in activities such as exploration, development, production, and transportation of oil and gas to prevent unauthorized discharge of pollutants into offshore waters. Operators shall not create conditions that will pose unreasonable risks to public health, life, property, aquatic life, wildlife, recreation, navigation, commercial fishing, or other uses of the ocean. Operators must submit an oil spill response plan to BOEMRE for approval. To continue operations, the facility must be operated in compliance with the approved plan. A BOEMRE-approved spill response plan must be reviewed and updated every two years. Additional discussion on this issue and the impacts of oil spills on subsistence is in the Final SEIS in sections II.D.1 Summary of Impacts: Alternative I-Proposed Action; IV.C.14 Subsistence-Harvest Patterns; IV.C.14 Subsistence-Harvest Patterns, Impacts from Natural Gas Development and Production; IV.E.15, Impacts from VLOS; and V.B.12 Subsistence-Harvest Patterns, Cumulative Effects.

Loss of Subsistence Resources. BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals is fundamental in coastal communities south proximate to the Chukchi Sea Lease Sale 193 area, as is discussed in the Final SEIS, Section IV.E.15. These communities could experience effects from a Very Large Oil Spill

(VLOS) through reduction of sharing through networks with households in northerly communities most proximate to the Lease Sale 193 area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and the consumption of marine mammals or fishes even if they are available and have been certified as being fit for human consumption due to resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards.

Mixed Cash-Subsistence Economy. BOEMRE recognizes the dilemma of North Slope Iñupiat living in a mixed cash – subsistence economy. Both Western and traditional foods are consumed by Iñupiat, and in the current mixed cash-subsistence economy, both are vital. It takes cash to buy Western style foods and subsidize even traditional activities such as subsistence hunts. Opportunities to make money can affect people’s choices on what to purchase, where to travel and live, and what to eat. With additional cash, many Iñupiat people elect to purchase better and more sophisticated equipment for subsistence hunting, while others might use the money to move outside of the community. Economic advantages can result in complexities due to increased choices for the individual or the household. An influx of money would only compound the issue. This is addressed in the Sale 193 FEIS III.c.2.a p. III-96, and III c.3.a. p. III-117.

Local Impact Compensation. Over the last two decades, Arctic communities have been very vocal about finding a “compensation” source—impact assistance, revenue sharing, bonds, or mitigation payments—to address impacts from OCS activities. Without congressional authorization, BOEMRE cannot provide or require industry to provide such compensation. Federal agencies cannot commit to impact assistance because that is a role of Congress and not the Executive Branch. Only Congress can amend the OCS Lands Act to include provisions for local impact assistance from OCS revenues.

In 2001, Congress appropriated impact-assistance funds for coastal states affected by OCS oil and gas production. The Coastal Impact Assistance Program (CIAP) was reauthorized by Congress under the Energy Policy Act of 2005. Under CIAP, states eligible to receive funding are Alabama, Alaska, California, Louisiana, Mississippi, and Texas. The CIAP funds are allocated to these states based on the proportion of qualified OCS revenues offshore of the individual state to total qualified OCS revenues from all states. Because of the increase in Alaska OCS oil and gas revenues resulting from the Chukchi Sea Lease Sale 193, Alaska FY 2009 and FY 2010 allocation increased to 15.45% of total CIAP funds available. On November 13, 2009, BOEMRE notified the State of Alaska that their allocation for FY 2010 was \$79,407,444.96.

Oil Spill Liability Trust. The Oil Spill Liability Trust Fund administered by the National Pollution Funds Center of the United States Coast Guard provides compensation for loss of subsistence uses in the event of an oil spill. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims.

Mitigation. The comment lacks specificity as to the particular mitigation measures or practices that are in question. Both the BOEMRE and NMFS thorough permitting decision processes and IHA/ITS procedures, respectively, require applicable mitigation practices to minimize or eliminate potential adverse effects and comply with the MMPA as required and within proven science principles, technology and cultural sensitivity. BOEMRE and NMFS consistently evaluate and improve upon mitigation requirements as proven science and technology emerges and efficiency improves.

Deferral Areas. Lease Sale 193 was held in February 2008 and excluded parcels located within the deferral corridor identified in Alternative IV. Additional discussion of lease sale alternatives is

provided in Issue Category 3. Discussion of how deferral corridors can reduce the potential for impacts to subsistence resources and harvest patterns is provided throughout the Sale 193 FEIS and the Final SEIS. To contextualizing the potential consequences of deferral corridors, additional information is provided below.

The application of a larger deferral area (Alternatives III and/or IV) does not necessarily require the movement of facilities further offshore. However, the geologic formations, prospects and potential discoveries that lie within a deferral area nearer to shore would not be available for lease, exploration or development. It is reasonable that the proportions of marine mammal populations that utilize habitats within a larger corridor deferral as well as those utilizing habitats within the “current deferral area” would experience decreased levels of potentially adverse noise exposure from lease activities such as ancillary seismic surveys; drilling; platform, product gathering pipelines, infrastructure construction and maintenance; production operations; and decommissioning. The sound sources associated with activities would be further from those marine mammals and habitats occurring within deferral areas. Noise from 2D and 3D seismic surveys, pipeline construction and operation from platforms to shore based facilities, and potentially increased vessel and aircraft travel routes could still occur, in part, within deferral areas as well as the lease sale area. Drilling noise, platform and infrastructure construction and operation noise and a large oil spill event(s) would not originate within nearer offshore deferral areas thereby providing some degree of decreased impacts to shorelines, marine mammals, their habitats and protect potential subsistence species seasonal distributions, abundance and human uses within a larger corridor depending on the specific temporal and spatial characteristics of a potential spill and related activities.

The comment that subsistence activities have expanded seaward, especially in light of technological improvements that are expanding use areas, is reinforced by a current BOEMRE study that documents two marine mammal subsistence hunts occurring in the Chukchi Sea over 20 miles from the coast. Existing mitigation measures should accommodate this expansion and preclude any significant impacts to subsistence harvest patterns. Incidental or accidental short term encounters can be further eliminated through effective communication between the communities and the BOEMRE and/or industry. Implemented stipulations include Stipulation No. 2, Orientation Program, Stipulation No. 4, Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources, Stipulation No. 5, the Conflict Avoidance Mechanism to Protect Subsistence Whaling and Other Subsistence Harvesting Activities, and Stipulation No. 6, Pre-Booming Requirements for Fuel Transfers, and are examples remedies for these types of disruptions (MMS, 2007: 1V-233). As indicated in the SEIS (see Section IV.C.14), the proposed action may lead to conflicts resulting from vessel traffic and aircraft traffic. However, overall impacts to subsistence (and by extension, sociocultural systems) are expected to be low. Every proposed action that will tier from the Sale 193 FEIS and Final SEIS involving seismic, exploration or development will require a NEPA analysis to identify environmental effects, including those on the human environment.

Thus, BOEMRE has mechanisms to assure that even if subsistence-use areas expand in the future, existing mitigation and corridors (the 25 statute mile coastal deferral area and the Corridor II deferral under Alternative IV), along with diligent regulation and enforcement, can sufficiently protect current use areas and avoid disturbance of subsistence areas.

Geographic Extent of Subsistence Activities. Subsistence use patterns are discussed fully in Section III. C. 2. Section III.B.4. discusses the biological environment not the specifics of human social and cultural use patterns of a given resource.

Fall Bowhead Hunt. Revisions to the text have been made in light of Wainwright’s successful bowhead whale hunt in the fall of 2010.

Issue 24. Environmental justice and impacts on health.

Summary of Comments

Many comments implicated Environmental Justice issues. Many of these comments raised the issue of Environmental Justice as it applies to Alaska OCS activities in general. Others specifically regarded the Draft SEIS and Revised Draft SEIS discussion of these issues.

The following is a list of general concerns voiced at public meetings and referenced in written comments:

- It is not acceptable to promote development at the cost of the tradition, culture, spirituality, and health of the Iñupiat people.
- Human rights issues occur where Native people are affected by decisions that didn't involve enough of their input or cause disproportionate impacts and risks on Native people.
- Being Iñupiat entails an inherent freedom to hunt and harvest from the vast frozen seas to nurture family and extended family in Alaska and the lower 48. Another commenter expressed a similar concern, "My son wants to grow to a man and a father and teach his kids how to hunt and to live the Iñupiat way."
- Standards for gauging risk and/or tolerance for risk may vary between the federal government and members of potentially-affected communities.
- Regional governments and regional Tribal organizations do not necessarily represent the viewpoints of all villages.
- If development is inevitable, it should at least occur on communities' terms, and be done in a manner that helps communities (i.e., fuel sales).
- Oil companies should be bound by written agreements concerning responsibilities, liability, etc.
- Missing information that relates to avoiding negative social and cultural impacts is essential for a reasoned decision.
- Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness – it gambles villagers' homes and way of life.
- Accidents are inevitable.
- History of accidents (i.e., *Exxon Valdez*, *Deepwater Horizon*) makes it difficult to trust the government or its documents.
- The thought of people that don't live in the Chukchi Sea area coming up and drilling and making rules is scary.
- If major environmental impacts occur, they will significantly impact many more communities than just those that are adjacent to the lease area (due to reliance on marine mammals).
- If resources are damaged, suicide rates could go up, especially since fewer young people are sustained by their culture.

One comment specifically asserts that the Draft SEIS failed to meaningfully address environmental concerns despite the imbalance of risks and benefits (as between North Slope residents and institutions versus outside companies, workers, etc.) posed by Lease Sale 193. This comment also stresses that information regarding means to prevent or mitigate negative social and/or cultural impacts is essential to reasoned decision-making. Similarly, another comment suggests the need to

protect the children's future, and that the next generation should have the opportunity to utilize subsistence resources. Money can not fix harm to the ecosystem and to the people.

The related issue of human health is often intertwined with Environmental Justice considerations and will also be discussed here. BOEMRE received a variety of comments regarding human health:

- Subsistence resources are so vital to our well being that if the health of the ocean deteriorates, so will the physical health of our people.
- The SEIS does not discuss cumulative impacts to health from gas development alone or cumulatively, or identify any mitigation measures to address these issues.
- The SEIS should include a health assessment that analyzes air quality issues and subsequent increases in respiratory problems, contamination of subsistence resources through water and air pollution, displacement and impairment of access to subsistence resources and associated food insecurity, and social issues associated with increased contact with non-resident industrial workers.

One comment states that the SEIS needs to address how the decision maker is weighing risks to Iñupiat, and how BOEMRE can justify forcing the communities to take these risks.

Finally, one comment asserted that various portions of the Draft SEIS Environmental Justice analysis constituted assumptions not supported by accepted facts, or lacked a distinct causal connection to oil and gas activities. Specifically, commenters challenged statements pertaining to a metabolic health effect that may accrue if subsistence foods became less available or desirable, as well as a statement concerning potential negative effects on various social pathologies (e.g., substance abuse, disease, etc.) that could indirectly result from increased oil and gas activities in the region.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

BOEMRE takes seriously each of its responsibilities, which include offshore energy and mineral resource development, as well as protecting human safety and environmental and cultural resources. Safety and protection of environmental and cultural resources continue to be a paramount concern for BOEMRE.

In preparing its analysis of Environmental Justice issues, BOEMRE analysts pay particular attention to issues raised by local residents, governments, and Tribes during scoping, public meetings, government-to-government meetings, and official public commenting opportunities. Concerns about the irreplaceable nutritional value of traditional foods and worries about the influx of disease or drugs and alcohol into village communities are very complex issues that are rarely quantifiable or directly traceable to a particular cause. Because these concerns exist, are plausible, and are very important to the North Slope residents and advocates who voice them, they are addressed in BOEMRE's environmental analyses. BOEMRE considers its environmental justice analysis credible and robust.

No Decision on Drilling in this Lease Sale Process. No decision on exploration drilling or development and production will be made during this process. The Final SEIS does provide several scenarios that facilitate analysis of environmental effects that could occur in the future, pending various approvals. BOEMRE analysts use the best available information to assess the potential for

accidental events and to model their potential impacts on the environment. The purpose of the Final SEIS is to inform the Secretary's decision on whether to reaffirm, modify, or cancel Lease Sale 193. Should a lessee submit a specific exploration or development and production plan at a later date, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would also be developed and required at that time.

Outreach and Consultation. The NEPA processes followed by BOEMRE for OCS leasing, exploration, and development and production follow a rigorous outreach and consultation protocol that attempts to involve local stakeholders at all levels of project planning.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, requires Federal Agencies to consult with tribal governments on Federal matters that significantly or uniquely affect their communities. In January 2001, a USDOJ Alaska Regional Government-to-Government policy was signed by all the USDOJ Alaska Regional Directors, including BOEMRE.

Since 1999, all BOEMRE public meetings have been conducted under the auspices of Environmental Justice. The EJ-related concerns are taken back to BOEMRE management and incorporated into environmental study planning and design, environmental impact evaluation, and development of mitigating measures.

On September 14, 2005, BOEMRE published a notice in the Federal Register requesting information for proposed Chukchi Sea Lease Sale 193 and providing a Notice of Intent to prepare an EIS for the proposed sale. The *Federal Register* notice stated the following:

...the EIS analysis will focus on the potential environmental effects of the sale, exploration, development and production in the areas selected to be considered for leasing. This NOI also serves to announce the initiation of the scoping process for this EIS. Throughout the scoping process, Federal, State, Tribal, and local governments and other interested parties aid ... in determining the significant issues, potential alternatives, mitigating measures and alternatives to be analyzed in the EIS and the possible need for additional information...

Many of these issues were discussed in government-to-government consultation with ICAS and tribal governments in Barrow, Wainwright, Point Lay, and Point Hope in a North Slope-wide teleconference on March 9, 2006, and the tribal government of Barrow on February 2, 2006 and March 6, 2006; Wainwright on March 9, 2006; Point Lay on January 30, 2006; and Point Hope on January 23, 2006. Open public community meetings in Barrow with the NSB (with translation available where requested) were held on December 13, 2004, February 1, 2006, and March 6, 2006; with the NSB Planning and Wildlife Management Departments on February 2, 2006; in Wainwright on March 9, 2006; Point Lay on January 30, 2006; and Point Hope on January 23, 2006. Outreach and information meetings with nongovernment organizations, included the AEW on December 13, 2004 and March 6, 2006; the ICAS on February 2, 2006; the Alaska Beluga Whale Committee on December 6, 2005; and the AEW on February 3, 2006. Each meeting included an overview of the activities planned in the area, information on the environmental review for each activity, and identified further opportunities for public participation in the EIS scoping and planning processes. Follow-up NEPA-related training was offered to the communities of Point Lay and Point Hope. BOEMRE is also exploring the creation of a local liaison position to help announce and explain its activities to community members.

BOEMRE conducted public meetings and government-to-government consultation for the Draft SEIS in early November 2010. Representatives from BOEMRE travelled to five North Slope village communities for the purposes of holding public hearings, receiving testimony, and meeting with interested Tribal and governmental leaders. In June 2011, BOEMRE conducted public hearings and government-to-government consultations on the Revised Draft SEIS. Representatives from BOEMRE traveled to five North Slope village communities and Fairbanks for the purpose of holding

public hearings, receiving testimony, and meeting with interested Tribal and government leaders. This process is discussed in more detail in the response to Issue Category 2.

Environmental Studies Planning. The Alaska OCS Region funds environmental studies that directly address the standing issues and concerns of Native stakeholders. BOEMRE involves local and tribal governments in its studies planning process and has held meetings in all local communities to assist their involvement in this effort. Particular studies that BOEMRE has funded to address sociocultural and environmental justice impacts are discussed further in the response section in Issue Category 28.

Conflict Avoidance Measures. Current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS and does not cause undue or serious harm to the human environment. Lease Sale 193 as held in February 2008 included Stipulation No. 5 – Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Marine Mammal Subsistence Harvest Activities. A discussion of this lease stipulation is provided in Section II.B.3.c(1) of the Sale 193 FEIS. This lease stipulation is incorporated by reference in the SEIS per Section II.C.1. Conflict avoidance measures are also required by NMFS and FWS under the MMPA. The MMPA requirements obligate operators to demonstrate no unmitigable adverse impacts on subsistence practices.

Operator Agreements. BOEMRE cannot require agreements between third parties; however, nothing in the OCS operating regulations prevents operators from entering into agreements with local communities. BOEMRE would be unable to enforce the provisions of such agreements, however, because the Federal government is not a party to the agreements.

Several oil and gas companies operating in the Beaufort Sea have elected to enter into a Good Neighbor Policy (GNP) with the NSB and AEWC. The GNP demonstrates an operator's commitment to a more immediate compensation system to minimize disruption to subsistence activities and provides resources to relocate subsistence hunters to alternate hunting areas or to provide temporary food supplies if a spill affects the taking of marine subsistence resources. The GNP demonstrates that the participating operators have made these commitments prior to conducting the proposed exploration or development operations. The GNP represents a viable mechanism for companies to assure timely and direct compensation to affected communities in the event of a major oil spill as required by OPA-90, and for expediting claims in accordance with 30 CFR 253 Subpart F. BOEMRE has informed lessees in its Information to Lessees Clause No. 19 – Good Neighbor Policy (Sale 193 FEIS Section II.B.3.c(3) and SEIS Section I.C.5).

Oil Spill Pollution Act of 1990. Under the Oil Pollution Act of 1990 (OPA-90), oil and gas companies are responsible for damages from an oil spill resulting from their operations, including damages to subsistence resources. The NSB and AEWC have concerns about the OPA-90 process and the remedies available to prevent disruption to seasonal subsistence activities. While BOEMRE recognizes these concerns, modifications to OPA-90 process are beyond the scope of the SEIS.

Oil Spill Liability Trust Fund. The Oil Spill Liability Trust Fund administered by the National Pollution Funds Center of the United States Coast Guard provides compensation for loss of subsistence uses in the event of an oil spill. Anyone who, for subsistence use, depends on natural resources that have been injured, destroyed, or lost can file a claim. Claims for increased public services may be filed by state and local government to cover the net costs of providing increased or additional public services during or after removal activities. For further information see http://www.uscg.mil/npfc/Claims/default.asp#types_of_claims.

Oil Spill Impacts. BOEMRE views oil spills as having the potential to cause long term significant effects that would disrupt or nearly eliminate subsistence harvests. Oil spills are never permitted and are always in violation of the law. Operators would be held accountable and responsible for mitigation and monitoring loss or reduction of subsistence species on the local subsistence harvesters

and the linked social organization and institutions. Operators would be held accountable for assuring that appropriate health assessments and assistance be made available for North Slope residents. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards. The concern that an environmental disaster could result in psychosocial distress culminating in suicide and other self-destructive behaviors has been identified in the SEIS, Section IV.E.18 and in the Sale 193 FEIS, Section III.c.1.

BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals is fundamental in coastal communities south proximate to the proposed Chukchi Sea lease sale, as is discussed in the SEIS, Section IV.E.15. These communities could experience adverse effects from a Very Large Oil Spill (VLOS) through the reduction of sharing through networks with households in northerly communities closest to the Chukchi Sea lease sale area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and consumption of marine mammals or fishes even if they are available and have been certified as being fit for human consumption due to resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards to reduce the potential of this scenario.

Human Health. Human health issues are discussed in detail in the Sale 193 FEIS, in both Chapters III and IV under sections for Sociocultural Systems and Environmental Justice. Dr. Aaron Wernham, acting on behalf of the Alaska Inter-Tribal Council and the NSB, provided review of these sections pertaining to public health and many suggestions were incorporated in the Sale 193 FEIS.

BOEMRE supports recent North Slope research initiatives in this area and suggests that this research effort be coordinated with other Federal and State land managers on the North Slope through the vehicle of the interagency North Slope Science Initiative. Ultimately, the most effective strategies to protect human health will depend on developing a monitoring strategy that identifies and tracks important regional health indicators and continuing to develop a more detailed understanding of the ways in which the determinants of health are impacted by development. In turn, this information may inform efforts to both refine existing mitigation measures and develop new measures that target health outcomes and health determinants specifically.

The Final SEIS supplements the Sale 193 FEIS with additional analysis of potential human health impacts.

Cumulative Effects and Sociocultural Change. BOEMRE acknowledges the potential for cumulative sociocultural and environmental justice impacts on the North Slope and that Iñupiat culture has undergone significant change. The influx of money (from wage employment) has added many benefits and raised the standard of living, but these influences also have given rise to an array of social problems, including increased alcoholism. The processes that give rise to these problems are many, varied, and complex, and go well beyond the direct and indirect effects of the cumulative impacting factors that result from onshore and offshore petroleum development.

Any realistic analysis of cumulative effects on the North Slope needs to consider both onshore and offshore effects. The most obvious cumulative effects have occurred and continue to occur onshore as oil and gas activities expand outward from Prudhoe Bay/Deadhorse. Development already has caused increased regulation of subsistence hunting, reduced access to hunting and fishing areas, altered habitat, and intensified competition from nonsubsistence hunters for fish and wildlife (Haynes and Pedersen, 1989; Pedersen et al., 2000).

Many other events have combined with the area's oil development to bring rapid social change to the area including ANCSA and ANILCA legislation, the formation of the NSB, the AEWG, and other local and regional institutions. It is important to note the difficulty in disaggregating the cumulative

effects of oil development in the region from these other relatively recent processes of extreme local social change. Most of the stress factors mentioned by local stakeholders can normally be associated with onshore impacts.

For additional discussion on this issue and potential disproportionate impacts on Chukchi Sea coastal communities, see the Environmental Justice analyses in Sale 193 FEIS Section IV.C.1.p(1) Environmental Justice (effects from the Proposed action) and Section V.C.16 Environmental Justice (cumulative impacts). The Sale 193 FEIS analyses are incorporated by reference into the SEIS.

Weighing Risks to Iñupiat. The role of the SEIS is to identify and provide detailed analysis of potential environmental impacts, including impacts to Iñupiat people. Pertinent analysis is provided within the Environmental Justice, Sociocultural Systems, Subsistence Harvest Patterns, and Economy sections of the SEIS. The Secretary of the Interior will weigh these risks when making the decision of whether to reaffirm, modify, or cancel the lease sale.

Geographic Scope of Impacts. BOEMRE views large and very large oil spills as having the potential to cause long term significant effects that would disrupt or nearly eliminate subsistence harvests. Oil spills are never permitted and are always in violation of the law. Operators would be held accountable and responsible for mitigating and monitoring loss or reduction of subsistence species on the local subsistence harvesters. The SEIS includes a Very Large Oil Spill (VLOS) analysis that describes the effects if the VLOS were to make landfall. Readers can use this analysis to determine the percentage of trajectories contacting a specific subsistence area. There is <.05 percent chance that a VLOS would reach the Kotzebue Sound region. The likelihood of direct impacts on subsistence in the Kotzebue Sound region is very low. However, BOEMRE recognizes that the subsistence lifestyle and resources are priceless to Alaska Native people, and that reliance on marine mammals that utilize the Chukchi Sea is fundamental in Kotzebue and other coastal communities south of the proposed Chukchi Sea lease sale. These communities could experience effects from a VLOS through reduction of sharing through networks with households in northerly communities most proximate to the Chukchi Sea lease sale area. These communities could also experience effects from a VLOS through reduction or suspension of subsistence harvesting and consumption of marine mammals even if they are available and have been certified as being fit for human consumption due to local resident concerns about tainting. BOEMRE has instituted many regulatory reforms that heightened standards for drilling practices, safety equipment, and environmental safeguards.

Issue 25. Impacts on human health and safety.

Summary of Comments

Several comments raised issues pertaining to human safety, stating the following:

- BOEMRE needs to obtain funds from Congress for adequate inspectors and enforcement personnel – it could take several years before BOEMRE has sufficient staffing.
- The document should include more information regarding the frequency and timing of inspections and equipment inspected.
- Oil and gas activities should not occur when ice movements and/or conditions may pose safety issues.
- Rescue efforts in poor conditions may endanger lives of Coast Guard personnel and others.
- Leases could lead to improved search and rescue operations.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments

- Environmental Organizations
- General Public

Response to Comments

Inspectors and Enforcement. BOEMRE continues to undergo substantial organizational changes intended to bolster public confidence and ensure safety. While this process could indeed require additional time and resources, it is certain that no activities that could affect Chukchi Sea resources would take place without appropriate regulatory oversight. Protocol in the Alaska OCS region has always been to have an inspector on a drill rig at all times during active drilling. Additional discussion of enhancements of BOEMRE's inspection program is provided in Section I.F.7.

Safe Conditions. Regarding conduct of oil and gas activities in certain ice conditions, current operating regulations at 30 CFR 250.202(d) and (e) state that proposed activities shall be conducted in a manner that does not unreasonably interfere with other uses of the OCS, and does not cause undue or serious harm to the human environment. Consideration of these factors will be incorporated into future, project specific reviews as well as enforcement activities.

Safety of Rescue Personnel. It is acknowledged that rescue efforts by the North Slope Borough, Coast Guard and other responders in poor conditions are often dangerous and could pose a risk to human safety. It is hoped that adequate planning and rigorous adherence to safety standards would preclude the need for such operations. Increased oil and gas industry presence in the Chukchi Sea, coupled with the aforementioned precautionary approach, could very well lead to improved search and rescue operations in the area. However, no specific plans exist at this time.

Issue 26. Cumulative impacts analysis.

Summary of Comments

Several comments assert inadequacies in the SEIS analysis of potential cumulative impacts, as follows:

- Conclusions from the 193 FEIS that “no significant cumulative impacts would result from routine activities associated with the Proposed Action or alternatives” and carried over into the Draft SEIS are unsupported by data, specific discussion, or a meaningful analysis, and are contrary to the plethora of serious impacts discussed throughout the Draft SEIS. Natural gas development and production will have impacts to the environment that are above and beyond those associated with oil and gas development activities.
- It astonishes that additional disturbance to whales from a natural gas pipeline, when combined with the potential for extirpation of species, does not rise to the level of significance.
- The agency has not provided specific data to support its conclusion that noise levels will not lead to significant cumulative impacts to whales.
- The key life forms in our oceans are already suffering increased risk from climate change, over-fishing, and pollution.
- The cumulative effects analysis must better analyze and explain why no significant impacts would occur with respect to bowhead.
- The cumulative effects analysis must include quantified or detailed information as opposed to broad and general statements.
- The Revised Draft SEIS contains only 13 pages on cumulative impacts. This is not sufficient. Also, the cumulative impacts section does not include an evaluation of how a large oil spill may contribute to cumulative impacts.

- The cumulative impacts section should include reasonably foreseeable activities that are occurring or may occur in the Bering Sea, Russia, Canada, i.e. oil and gas activities.
- The cumulative impacts section should evaluate potential radioactive impacts to Chukchi Sea resources stemming from the radiation leak in Japan.
- A more robust cumulative effects analysis, particularly for bowhead whales, is required. This analysis should encompass the whole geographic range of the bowhead and all human activities that could potentially impact this species or degrade its habitat (i.e. activities in American Arctic, Russian Far East, and Canadian Beaufort; icebreaking; increased vessel traffic in the Bering Straights, Chukchi Sea and Beaufort Sea; commercial fishing [including in the North Bering Sea]; increased military presence; and other relevant operations). This cumulative effects analysis should also account for climate change and ocean acidification.
- When assessing cumulative effects to migratory species such as bowhead whale, the geographic range under consideration should be expanded.
- The analysis fails to address the cumulative impacts to coastal and terrestrial resources of Kasegaluk Lagoon and to tundra wetland environments within the National Petroleum Reserve-Alaska. This comment offered no specifics to support this point.
- The SEIS should evaluate the NRC cumulative impacts study.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations

Response to Comments

Support for Conclusions. The conclusions of cumulative impacts analysis in the Sale 193 FEIS are incorporated by reference and summarized in the Final SEIS. Analysis of the incremental contribution of natural gas development and production to potential cumulative impacts to the environment is provided in Chapter V of the SEIS. This includes analysis of the cumulative impacts to whales from installation of an offshore gas pipeline. The structure of the SEIS's Cumulative Impacts Analysis is explained in Section V.A.1. All factors pertinent to understanding potential cumulative impacts are considered in the analysis.

Vessel Noise and Traffic. The Sale 193 FEIS provides an extensive discussion of the potential effects of noise on cetaceans (Section IC.C.1 F(1)(c), pages IV-84 through IV-90). The primary disturbance factor to bowhead whales from natural gas development and production is expected to be vessel noise and traffic. A discussion of the potential effects on cetaceans from development and production activities is provided in Sections IV.C.1.f(1)(e)2c) and IV.C.1.f(1)(e)2d) of the 193 FEIS. A discussion of cumulative noise effects on cetaceans is provided in Section V.C.6.a. These discussions are incorporated into the SEIS by reference. Also, as discussed in the Section IV.C.6 of the SEIS, noise associated with development and production of OCS natural gas is expected to be at low levels from stationary (production platform) to very slow moving (pipe-laying operations), and thus avoidable, sources. Whales appear to exhibit less avoidance behavior in response to stationary sources of relatively constant noise than in response to moving or impulsive sound sources.

Environmental Review and Mitigation. Oil and gas activities are subject to BOEMRE NEPA review, as well as the substantive and procedural requirements of the MMPA and, in the case of the bowhead whale, the ESA. Further, the natural gas development and production scenario analyzed in the SEIS acknowledges that appropriate mitigation would be developed and required as a result of the technical and environmental reviews conducted on any proposed offshore gas pipeline. Mitigation

could include timing restrictions on pipe-laying activities during the bowhead migrations, required marine mammal observers, and curtailment of operations if marine mammals come within an established safety zone. Thus, the analysis concludes that effects from installation of an offshore gas pipeline would be minimized to the extent possible and effects would not rise to the level of significance.

Large Oil Spill. The potential for a catastrophic oil spill leading to extirpation of species was certainly considered in this cumulative effects analysis. However, a remote possibility of a catastrophic event does not necessarily translate into an expectation of “significant” impacts, whether alone or in a cumulative sense. The SEIS cumulative effects analysis found that the very small potential for extirpation of species, even when combined with other incremental effects (such as those from an offshore gas pipeline), does not rise to a level of significance with respect to the significance thresholds defined in the Sale 193 FEIS and SEIS.

Cumulative impacts associated with the hypothetical VLOS scenario are discussed for each resource in Section IV.E, principally within Long-Term Recovery subsections.

Geographic Scope of Analysis. Canadian energy development plans in the eastern Beaufort Sea are uncertain. Future gas and oil development in Russia is unknown and the information available is speculative. Although cumulative effects analysis necessarily involves assumptions and uncertainties such as any data or projected modeling that may be gathered on these subjects, the opening statements on the cumulative effects in Chapter V outline reasons for not including these and other speculative events in the analysis.

Cumulative Impacts to Bowhead Whales, Generally. The analysis simply found little potential for activities associated with the natural gas development and production scenario to contribute incremental, additive, or synergistic effects on bowhead whales. Absent disagreement with the methodology or identification of factors not considered, the existing level of analysis in this section is determined to be sufficient. Additional discussion of the potential effects of development and production activities to endangered whales is provided in the ESA section 7 consultation biological evaluations (USDO, MMS, 2006 and 2008) and biological opinions (USDOC, NOAA, NMFS, 2006 and 2008).

Cumulative Impacts to Bowhead Whales, Geographic Scope. The Sale 193 FEIS Section V.C.6. T& E a(1) through a(8) provide detailed discussion of cumulative effects to Western Arctic bowheads and is incorporated by reference to the SEIS. These sections include considerations, uncertainties and discussions for range wide cumulative effects to Western Arctic bowhead whales regarding climate change, increasing commercial fisheries, shipping traffic, research activities, subsistence activities, pollution and contaminants and other oil and gas activities. The SEIS Section V.B.6. summarizes cumulative effects to bowhead whales.

Quantification of Impacts. The cumulative effects analysis considers all past, present, reasonably foreseeable, and even some speculative activities. Many of these activities, as well as their potential effects, are inherently unquantifiable. While avoiding undue speculation, BOEMRE has attempted to provide a high level of detail and has quantified relevant information and analysis wherever appropriate.

Length of Analysis. The relative brevity of Chapter V can be attributed to the following factors: the limited scope of the District Court remand; incorporation by reference of the lengthier cumulative effects discussion within the Sale 193 FEIS; the similarity between oil development and production and natural gas development and production in terms of their potential to contribute cumulative effects; and the fact that cumulative effects associated with the VLOS scenario are largely discussed in Section IV.E of the Final SEIS, as opposed to Chapter V.

NRC Study. BOEMRE has analyzed the NRC document entitled “Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope”. Although excellent in its scope and completeness, it is not the most current information upon which the present analysis should be based.

Fukushima. The Fukushima nuclear power plant disaster has been thoroughly discussed as a potential pollutant factor for nuclear radiation spreading to Alaskan waters by scientists from the Alaska Health and Social Services offices. Reports have consistently stated that there is no immediate or anticipated threat from nuclear radiation to environmental resources from this disaster reaching Alaska waters, therefore no discussion of this issue is needed in the document.

Issue 27. Analysis of Incomplete or Missing Information (“1502.22 Analysis”)

Summary of Comments

A variety of comments were received on the Analysis of Incomplete or Missing information (“1502.22 analysis”) presented in Appendix A of the Final SEIS pursuant to 40 CFR 1502.22. The comments ranged from the general to the very specific.

Many comments approved of the 1502.22 analysis, employing adjectives such as thorough, methodical, efficient, understandable, rigorous, well-reasoned, etc. Commenters frequently asserted that BOEMRE’s process fully meets the letter and intent of CEQ’s requirements. Some comments generally approved of the analysis but suggested small edits to certain items. Grammatical and other small changes to the 1502.22 analysis itself constitute BOEMRE’s response to these suggestions.

Other comments disapproved of the analysis, asserting one or more of the following:

- The 1502.22 analysis does not comply with the letter or spirit of applicable law and should be rejected.
- The conclusions of the 1502.22 analysis are contrary to evidence in the record and based on mere speculation.
- BOEMRE made an across-the-board and unwise determination that none of the missing information was essential to a reasoned choice. This is a rushed decision that dismisses and/or ignores the obligations to collect missing science; it discounts potential negative impacts to many species and habitats already threatened by climate change.
- It is astonishing that for the hundreds of pieces of missing information, the agency concluded that not one piece of information was essential for evaluating reasonably foreseeable impacts or to a reasoned choice among alternatives.
- BOEMRE must make a good-faith effort at obtaining information that is realistically attainable.

Many comments critical of the 1502.22 analysis focused on the concept of drilling:

- The Draft SEIS represents a decision by BOEMRE to allow drilling no matter what the impacts.
- BOEMRE should not allow drilling to go forward unless there is scientific knowledge demonstrating that drilling in the Arctic is safe.

Several comments asserted that analysis should not be deferred to later stages as BOEMRE’s ability to regulate potentially harmful activities is constrained once lease sales are approved:

- BOEMRE must have complete information about the environmental effects at the lease sale stage before it decides whether to authorize oil and gas activities, and decides what mitigation measures may be appropriate.

Several comments suggested that the 1502.22 analysis of incomplete information is flawed or inadequate:

- BOEMRE's three-part test for each piece of missing information is flawed because nowhere in section 1502.22(b) is a reasoned choice among alternatives the focus. The agency should instead focus on the importance of the information to evaluating "reasonably foreseeable significant adverse impacts."
- BOEMRE's test and the accompanying pages of missing information fail to provide the analysis required by sections 1502.22(b)(3) and (4) because nowhere does the SEIS provide a summary of existing credible science or the agency's evaluation of impacts based on generally accepted methodologies.

Some comments suggested alternate or more inclusive definitions for the term "essential." For instance:

- The threshold for what information is "essential" should be lower for Chukchi Sea resources such as bowhead whales because of the rapidly and unpredictably changing conditions in the Arctic.
- The definition should be expanded to include all other activities within as well as outside the action area that could affect Chukchi Sea resources.
- The definition should focus on the ability to make informed decisions about where, when, and under what conditions oil and gas activities should be permitted.
- In addition to analyzing each individual item of incomplete information, BOEMRE should also consider for each resource and conflicting use the totality of what it knows and does not know. Otherwise, the analysis avoids acknowledging the sheer weight of all of the information not known that, taken as a whole, reveals a poorly understood ecosystem and poorly understood potential impacts.

A few comments presented detailed critiques of one or more of the "common themes" identified by BOEMRE in its introduction to Appendix A of the SEIS and used in the 1502.22 analysis to assess whether a particular item of incomplete information is "essential to a reasoned choice among alternatives." To summarize:

- Statements that there is enough information available now for informed management and decision-making are unsupported where large quantities of data are missing about the Chukchi Sea. This is especially true where BOEMRE fails to identify the information upon which it is relying, and where statements in the original EIS point to large data gaps.
- Reliance on other environmental laws and regulations and future mitigation measures ignores the agency's responsibility to analyze impacts.
- Conclusions that information will be known at a later stage of environmental review are contrary to the language of section 1502.22, and overlook the time constraints of the 30-day review deadline under the OCS Lands Act.
- Reliance on an assumption that significant adverse effects would occur [in the event of a catastrophic oil spill] fails to provide the decision maker and public with a clear picture of anticipated impacts.
- Conclusions about the commonality of the impacts between alternatives ignores important impacts, ignores distinctions between alternatives (including the no action alternative), and is evidence that BOEMRE failed to present a reasonable range of alternatives. [Regional variation of species abundance was cited to illustrate these points.]

One comment forwarded two general points as well as many specific comments on individual items within Appendix A. The general points questioned the need for discussion of oil spill-related impacts within the 1502.22 (noting that the EIS addresses leasing and exploration, not development) and also called for stronger language referencing the lack of documented impacts to cetaceans associated with OCS oil and gas operations. The specific comments referenced additional information that purportedly demonstrates a lack of potential significant impacts to OCS resources.

A variety of other comments suggest inconsistencies and/or inappropriate applications of 40 CFR 1502.22:

- BOEMRE cannot credibly assert that existing information is sufficient to “support sound scientific judgments and reasoned managerial decisions” about where to allow oil and gas activities when it does not know what areas of the sea are biologically significant. Missing spatial information—e.g. population distributions, areas of biological importance, etc.—are essential to lease sale decisions.
- NOAA’s 28 Feb 2011 comments on the Draft SEIS stated that, contrary to BOEMRE’s assertions, information about how seismic surveying will affect fish is essential to the lease sale decision and must be obtained. BOEMRE appears to have ignored NOAA’s comment.
- On pages A7 and A69 of the Revised Draft SEIS, BOEMRE states that it does not have sufficient information to determine effects on marine mammals of oil and gas activities. BOEMRE should obtain this information before making decisions about Lease Sale 193.
- The implicit assertion that noise would not cause significant effects to marine mammals is contradicted by previous statements that seismic surveys, if unmitigated or insufficiently mitigated, could in certain circumstances cause biologically significant effects.
- Activities pertaining to a drilling plan proposed for the Chukchi Sea in the 2010 season create a “serious risk of harm to bowheads due to consequences of disturbance, direct injury due to exposure to dangerous levels of noise, and ship strike.” This analysis by David Bain contradicts BOEMRE’s assertion that significant effects on bowhead whales could only occur as a result of the unlikely event of a large oil spill.
- The statement that the probability of an oil spill occurring, and its consequences, are the same for all alternatives contradicts assertions in the 2007 FEIS (at IV-20-21).
- The natural gas analysis omits any acknowledgement of incomplete information save for the discussion of effects on archaeological resources. This ignores incomplete information regarding noise and disturbance from drilling and associated ship and aircraft traffic and, therefore, runs afoul of 40 CFR 1502.22. The VLOS discussion does not acknowledge incomplete information relevant to the analysis, and therefore violates 40 CFR 1502.22.

Source of Comments

- Federal Government (EPA, NMFS)
- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Systematic Decision Process. In addressing the second and third concerns of the District Court's remand, BOEMRE analysts and managers reviewed each item of "incomplete" information cited in Exhibit 129 (which was submitted to the District Court by the plaintiffs), as well as several dozen additional items identified through internal review of the Sale 193 FEIS, in accordance with the requirements of 40 CFR 1502.22. BOEMRE made no "across the board determinations"; rather, we developed a systematic process under which each item received focused, objective, and complete review. BOEMRE's three-step 1502.22 analysis is based on a careful reading of the regulation. This approach, developed from the most reasonable reading of the whole regulation, is outlined and depicted in the form of a flow chart in the introduction to Appendix A of the Final SEIS.

Individual analysis of each item is provided in Appendix A of the Final SEIS. While many items of incomplete information referenced in the Sale 193 FEIS are indeed "relevant to reasonably foreseeable significant adverse effects on the human environment," the results of BOEMRE's 1502.22 analysis confirm that none of these items are "essential to a reasoned choice among alternatives" at the lease sale stage of the OCS Lands Act process. Consequently, there is no 1502.22 requirement to assess the attainability and/or cost of acquiring these specific items of information. The BOEMRE Alaska OCS Region will continue its ongoing, comprehensive efforts to collect data and information regarding Arctic ecosystems and communities in accordance with the requirements of the OCS Lands Act and NEPA and consistent with the Bureau's commitment to reasoned and informed decision-making.

Lease Sale Decision. The Final SEIS provides the Secretary of the Interior with sufficient information regarding potential environmental impacts to decide whether to reaffirm, modify, or cancel Lease Sale 193. No decision on drilling will be made during this SEIS process. If a lessee submits a specific proposal to drill at a later date, BOEMRE would conduct a full technical and environmental review incorporating the information that becomes available at that time. A determination to accept drilling at any cost would both exceed the delegated authority of the Bureau and violate its statutory and regulatory duties to protect the marine, coastal, and human environment. BOEMRE takes these statutory responsibilities very seriously.

Specific Background and Methodology for the Analysis. Regarding specific criticisms of BOEMRE's 1502.22 process, readers are referred to the "Background," "Methodology," and "Results" portions of Appendix A of the SEIS. Relatively detailed explanation of the 1502.22 analytical process, along with important definitions, assumptions, and considerations that helped shape this process, are provided there. BOEMRE has reviewed and considered the specific criticisms summarized above, but determined that suggested changes to the existing 1502.22 methodology or analysis are not warranted. Additional support for moving forward with the existing process and analysis is provided by the EPA's official comment letter regarding the Draft SEIS, dated November 29, 2010. This letter reads in relevant part:

We are particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. We also believe the process employed by your agency fully meets the intent of the Council of Environmental Quality's requirements for such situations.

In light of the above, no substantive changes have been made to BOEMRE's 1502.22 methodology or analysis in the Final SEIS.

Several minor revisions have been made in response to comments highlighting typographical and formatting errors within Appendix A.

Contents of Appendix A. BOEMRE has not incorporated into Appendix A any additional information or opinions regarding the potential for environmental impacts. The role of BOEMRE's 1502.22 analysis is to analyze the importance of specific pieces of incomplete information within the

lease sale decision-making process. Appendix A is not an appropriate venue to debate the Sale 193 FEIS assessment of potential environmental impacts. Incorporating additional information intended to downplay or heighten potential impacts is similarly inappropriate. Because the cited information would not assist BOEMRE in assessing the importance of incomplete or missing information to the lease sale decision-making process, it has not been incorporated into Appendix A.

Information Regarding Ecologically Important Areas. Decades of study in the region have elucidated the heightened importance of many areas within the Chukchi Sea, as well as the North Slope. The knowledge which exists about these areas is indeed sufficient to support sound scientific judgments and reasoned managerial decisions about where to allow oil and gas activities and about which areas are biologically significant. This understanding is reflected in the Secretary's decision to include a 25 Statute mile deferral in the 2007-2012 Five-Year Program, as well as the selection of Alternative IV (Corridor II deferral) from the Sale 193 FEIS for Lease Sale 193. Within the SEIS, special consideration is given to coastal communities, the spring lead system, subsistence harvest areas, migratory corridors, Ledyard Bay Critical Habitat Unit, Kasegaluk Lagoon, Hanna Shoal, avian breeding colonies such as Cape Lisburne and Cape Thompson, designated Essential Fish Habitat, caribou calving grounds and insect relief areas, special vegetative communities, marine mammal haulout areas, and many other important areas.

Consistency with David Bain's Analyses. The report by David Bain does not indicate the context and definition of "serious risk". It also does not include any specifics of the "harm to bowheads" in terms of individuals or portion of population exposed to or injured via noise and/or ship strikes in relation to the exposure of the Western Arctic bowhead whale population to varying levels of similar activities since 1980. There is no evidence to suggest that ship strikes related to industrial vessel traffic has or is occurring in the Alaskan Arctic, but BOEMRE recognizes and notes that increased levels of vessel traffic could increase the opportunity for bowhead vessel contact. BOEMRE recognizes the potential effects of noise upon bowhead whales; however, the application of mitigation measures as analyzed in the anticipated effects upon bowhead whales are believed to be the best current technologies available to minimize such adverse effects. Further, there is currently no evidence that direct injury due to exposure to noise or ship strike from similar and at times greater levels of industry activity in the Chukchi Sea occurred in the period from 1979 to present. Detectable levels of decreased productivity, population growth rate, fecundity have not been documented during that period nor have increased incidence rate or levels of injury or mortality been documented. Mr. Bain includes numerous general and hypothetical points regarding potential exposure and take rates to Arctic species, but this non-peer reviewed analysis does not indicate that these have or are occurring in the Arctic relative to oil and gas activity. While Mr. Bain refers to a "serious risk", BOEMRE does not have any way to assess whether this finding is actually inconsistent with BOEMRE's analysis without some context for the risk or a definition of when a risk becomes "serious". Further, specific proposed drill plan actions are not evaluated in the Sale 193 FEIS or SEIS documents. BOEMRE analysis of such drilling plans in the Chukchi Sea would occur in subsequent NEPA documents.

A response to official NOAA comments regarding incomplete information on fish is provided in Issue Category 16.

Statements Indicating Insufficient Information. The referenced statements on pages A7 and A69 originally appeared in the Sale 193 FEIS and are reproduced in Appendix A so that they may be analyzed in appropriate context and under the applicable protocols of 40 CFR 1502.22.

Incomplete Information in the Gas and VLOS Scenarios. BOEMRE carefully adhered to the requirements of 40 CFR 1502.22 when developing this Final SEIS. Where BOEMRE identified instances of incomplete or missing information that are relevant to reasonably foreseeable significant adverse effects associated with the proposed action, the Final SEIS identifies this information. The

analysis then goes on to contextualize the incomplete or missing information and proceeds to the next step of 40 CFR 1502.22 analysis.

Impacts Same for All Alternatives. It is true that impacts of an oil spill could vary by location of spill source. This is why Appendix A speaks to the “commonality” of potential impacts during an oil spill, but does not claim that each spill has identical impacts. BOEMRE’s use of the OSRA and trajectory analysis accounts for differences in oil spill impacts associated with the location of the spill source. As indicated in the Sale 193 FEIS and the Final SEIS (including Appendix A), sufficient information exists to adequately inform the decision maker about these potential impacts, as well as similarities and differences associated with each alternative.

Issue 28. Impacts and risks of oil and gas activities.

Summary of Comments

Many comments stated that the risks associated with oil and gas development stemming from the lease sale are too high. Most of these comments focused on the potential for an oil spill. A summary of additional points is provided below:

- It is wrong and irresponsible to treat the Earth’s resources like they belong to this generation of humans only.
- Risks are heightened in this area, which features species of limited range and limited populations.
- Decisions regarding the Alaska OCS should follow a precautionary approach.
- Poorly informed development poses unnecessary risks to high quality habitat.
- The time to prevent an environmental tragedy is now, prior to leasing. Once leases are issued it is too late despite all the stipulations, mitigation, and good intentions of regulators when permitting development.
- The oil spill in the Gulf shows that large spills from exploration drilling can happen and that, even in the relatively benign conditions of the Gulf, they cannot be contained. These facts alone fundamentally undermine BOEMRE’s assumptions about oil spills in the original EIS.
- The people of the coastal communities would need substantial training on how to respond to an oil spill. Corporations currently offer training to a few people, but this will not be sufficient. Young people are encouraged to go to college and get training (i.e. oil spill response training), but they are not ready. Things are moving too fast.
- The decision to release the draft SEIS in its current form may expedite oil drilling plans in the Chukchi Sea and could lead to permanently destructive consequences for the wildlife and Alaska Natives who depend on this region for survival.
- The potential for an Arctic oil spill, and the inability to contain or clean it up, represents a significant and unacceptably unquantifiable risk to the Chukchi Sea ecosystem and the people who depend on its resources for physical health and cultural and social well being.
- The stakes are high. The chances of a major spill from drill platforms or pipelines as a result of Lease Sale 193 are 25 to 54 percent.
- Ice-free summers in the Arctic will cause severe weather and ocean conditions that will increase the risk of an accident.
- In the event of a VLOS, the inability to remove oil from the ecosystem is likely to exacerbate adverse effects.
- One drop of oil could become a big problem for our animals.

- There is tremendous scenic value in this region that would be compromised.
- Significant amounts of oil do not make it to the refinery no matter the technology and conscientiousness employed.
- The SEIS should describe the added risk associated with producing both oil and gas during the later stages of oil extraction.
- The SEIS should assess the added risks associated with the shift in focus from oil extraction to gas extraction.
- The movement of drillships off the drill location and suspension of operations adds considerable risk to the drilling operation.
- The stakes are high because as the 2007 FEIS notes, there is a 27–54% chance of a major spill as a result of Lease Sale 193.

Many others presented a different perspective:

- Alaska’s North Slope and OCS are very likely the most studied energy basins in the United States. In just that past 10 years, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi seas.
- An OCS lease authorizes a lessee to engage only in “ancillary activities” that do not harm the environment pending further review and approvals. BOEMRE approval is required prior to any exploration, development, or production activities within a lease.
- A lease sale is not an authorization to drill. Further environmental review, public process, and federal agency approvals are required before any exploration, development, or production activities may occur.
- Technological advances and the broad knowledge gained from over 250 studies (at a cost of more than \$500 million) should also instill confidence in Alaska drilling.
- Thirty years of operational experience in Alaska have led to new technologies and practices that have steadily reduced the footprint and impacts of exploration and production activities to wildlife.
- Lack of infrastructure and related issues will be resolved once activities are allowed to go forward.
- Operating conditions in the Alaska OCS are categorically different than those in the deep waters of the Gulf of Mexico and pose much lower risk. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. In addition, the shallow water depth in the Chukchi Sea would allow blowout preventers to close much more rapidly than those in deep water. The blowout preventers would also be directly accessible to dive teams, unlike the Gulf where any maintenance or repairs had to be accomplished by remote control vehicles. Another distinction is that many Alaskan offshore operations are seasonal in nature. There are also fundamental differences between state and federal oversight and regulatory framework, as well as fundamental differences in the geology of the regions.
- Oil and gas production in the Chukchi Sea can occur safely and without taking unnecessary environmental risks, as has been proved by operations in the North Atlantic.
- There has never been a blowout in the Alaska or Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi without incident. Further, over 200 offshore wells have been drilled in the Canadian Beaufort Sea since the early 1970s without a significant oil spill. These wells were drilled more than two decades ago and utilized older technology than what would be used now.

- Oil and gas development in Alaska would be done under the world’s highest safety and environmental standards. All activities will be governed by stringent lease stipulations identified in the 193 FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence and other activities.
- The North Slope is an example of how development can occur responsibly, even where there remain some data gaps.
- So far, industry plans have committed to unprecedented provision for prevention and spill response that go above and beyond what is required by law.
- New technology (e.g. 3D and 4D technology) leads to reduced environmental impacts and footprints from infrastructure.
- Specific plans for exploration have/would include numerous additional safety and mitigation measures, and would leverage resources and experience in the Arctic from the Alaska Clean Seas consortium.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

A majority of responses touched on this complicated and controversial set of issues. BOEMRE believes it is possible to strike a balance between responsible OCS exploration, development, and production and protection of the marine, coastal, or human environment.

OCS Lands Act - Four Stage Review Process. The OCS Lands Act created a four-stage review process for planning, leasing, exploration, and production of oil and gas resources in Federal waters. The four-stage review process gives the Secretary a “continuing opportunity for making informed adjustments” in developing offshore energy resources in order to ensure all activities are conducted in an environmentally sound manner [*Sierra Club v. Morton*, 510 F.2d 813, 828 (5th Cir.1975)]. Should a lessee submit a specific exploration or development and production plan, BOEMRE would conduct a full technical and environmental review incorporating the best available information at that time. Additional site- and proposal-specific mitigation measures, if needed, would be developed and required at that time.

Chance of One or More Large Oil Spills. When the commenter says that chances of a major spill are 25 to 54 percent, the commenter is expressing the chance of one or more large ($\geq 1,000$ bbl) spills occurring using the spill rates at the 95% confidence interval over the 25 year life of the proposed action, as is explained in the Sale 193 FEIS. The BOEMRE provides information on the mean and 95% confidence intervals for large spills defined as a threshold value of 1,000 barrels or more. The U.S. Coast Guard defines a major spill as 2,380 barrels or more. The intent of the 95% confidence intervals is to inform the decision maker of the uncertainty in the mean estimate.

The chance of one or more large spills occurring assumes there is a 100% chance that exploration and subsequent development and production will occur. Using the mean spill rates the estimated total mean number of large spills is 0.51 (half a spill) over the 25 year life of the proposed action. The total mean number of spills is derived from the sum of the platform, wells, and pipeline mean number

of spills added together over the entire 25-year life. The chance of no large spills occurring is 60% and the chance of one or more large spills occurring is 40% over the 25 year life. Using the mean spill rate the chance of no large pipeline spills occurring is 74% and the chance of one or more large pipeline spills occurring is 26% over the 25 year life of the project. The chance of no large platform spills occurring is 81% and the chance of one or more large platform (wells and platform) spills is 19%.

A key element in oil-spill analysis is an assessment of one or more large spills occurring. Large oil spills are unarguably contentious. One of the fundamental problems when using quantitative analysis is related to the way the results of the analyses are expressed and interpreted. People evaluate risks in incompatible ways, based on their value systems (Thompson and Dean, 1996) and their perceived degree of exposure to a potential risk. Oil spills have high levels of “dread potential” (Slovic, 1987) because of their potential to produce consequences in the event of accidents, even though such occurrences have been estimated to have low occurrence probabilities. The BOEMRE recognizes that some stakeholders may wish to reduce the chance of a large spill occurring, while others may consider any chance of a large spill occurring as unacceptable. Still others may find the chance of a large spill occurring as an acceptable tradeoff for the benefits derived from oil and gas production. The Secretary of Interior, in his decision to affirm, amend or cancel the sale considers alternative perspectives on the chance of one or more large spills occurring.

With adherence by the operator to BOEMRE temporary well abandonment requirements in 30 CFR 250 Subpart Q, the move off the well does not add risk to the operation as a whole.

Oil Recovery and Cleanup. It is acknowledged that in the event of a VLOS in the Chukchi Sea, some portion of spilled oil would indeed persist in the ecosystem long after the original spill, despite recovery and cleanup efforts. The SEIS analyzes these potential effects with its analysis of Phase 5 of the hypothetical VLOS scenario: “Post-Spill, Long-Term Recovery.” The most pertinent aspect of this phase would be “Contamination”, which evaluates “pollution stemming from an oil spill” that “may contaminate environmental resources, habitat, and/or food sources.” Such impacts are addressed, as appropriate, within each resource section of Section IV.E.

Local Training and Hiring. Training and hiring for jobs in the oil industry is a topic for discussion between community and tribal leaders and the oil industry. The scope of this SEIS is to inform the decision maker (Secretary of the Interior) with the relevant environmental information he needs to make an informed choice as to whether to reaffirm, modify, or cancel Lease Sale 193.

Native Corporations such as Umiak Corporation have established contracts with Alaska Clean Seas (ACS) to provide trained responders for Village Response Teams (VRT) in the event of a spill response. Members of the community may participate in this training as appropriate. Those interested in becoming members of a VRT should contact ACS or Umiak Corporation to get additional information on training and participation on these teams.

Visual Impacts and Scenic Value. BOEMRE agrees that there is tremendous scenic value in the Chukchi Sea region. Exploration seismic surveying and drilling are temporary activities. A production platform more than 50 miles from the coast would likely not be visible to a person standing on the shore. The expansion of onshore support facilities to accommodate natural gas would entail minimal new disturbance. The projected onshore oil and gas transport pipelines across NPR-A are expected to be elevated and therefore visible for some distance. Permitting of a pipeline across NPR-A would be under BLM jurisdiction. The BLM currently requires pipelines across NPR-A to be elevated a minimum of 7 ft. For additional information the reader is referred to the BLM’s NPR-A Integrated Activity Plans/EISs (http://www.blm.gov/ak/st/en/prog/planning/npra_general.html). The BLM evaluates the potential visual impacts of elevated pipelines. Emissions associated with OCS activities and support facilities are subject to limitations pursuant to regulations administered by EPA under the Clean Air Act.

Oil Spill Information. The comment asserting that oil is spilled no matter what technology is employed provides no references or data to support this assertion, so some background information is provided here. Between 1971 and 2007, OCS operators produced almost 15 billion barrels (Bbbl) of oil. During this period, there were 2,645 spills that totaled to approximately 164,100 barrels (bbl) spilled – equal to 0.001% of barrels produced or about 1 bbl spilled for every 91,400 bbl produced. This record has improved over the time analyzed in available studies. Between 1993 and 2007, the most recent 15-year period, almost 7.5 Bbbl of oil were produced. During this period, there were 651 spills that totaled to approximately 47,800 bbl spilled—equal to 0.0006% of barrels produced or approximately 1 bbl spilled for every 156,900 bbl produced (Anderson, 2008, pers. comm.). Although the consumption of petroleum products is increasing, spill rates are decreasing (Etkin, 2009). Approximately 99% of OCS spills are less than 10 bbl in size. The DWH event provides additional data points for these estimates.

Additive Risk of Oil and Gas Operations. With respect to potential risks associated with producing both oil and gas, or shifting focus from oil to gas, BOEMRE has no evidence that either the risk of adverse effects or the magnitude of effects would be additive during this transition. Further, under the OCSLA four-stage review process, the potential for additive effects would be evaluated—and mitigation would be developed if necessary—at each stage, and as the specific circumstances of natural gas production arise. For example, in the event that modifying an oil production platform to produce natural gas is proposed, BOEMRE would require a revised or modified development and production plan. Such revised or modified plans would require and undergo thorough technical and environmental review to address potential risks. All reasonably foreseeable additive and synergistic impacts associated with natural gas development and production are evaluated in the Cumulative Effects section of the SEIS.

BOEMRE substantially agrees with the factual assertions in all the points regarding safety standards and records listed above. Should oil and gas activities proceed in the OCS, BOEMRE will continue to act under its mandate and mission as the regulating agency to uphold the vigorous safety standards that Arctic people and ecosystems deserve.

New Technology. Advancements in seismic technology have improved the resolution of subsurface structures and reservoirs that could contain oil and gas. This technology makes the exploration program more efficient because test wells are located in optimal locations and fewer wells are drilled to determine the viability of a potential prospect. This reduces potential environmental impacts. New technologies used for production wells increases the recovery per well and could reduce the size and number of offshore platforms. Advancements in subsea well technology could also reduce the number of offshore platforms, thereby reducing the longer term impacts of large surface facilities. There are many other technologies that are continuing to be developed that will improve project economics and reduce environmental impacts. The frontier areas in the Arctic are at the forefront of this technology trend.

Issue 29. Lessons from the *Deepwater Horizon* Event

Summary of Comments

This issue was raised in most comments received. Many comments expressed one or more of the following assertions:

- It is critical that all necessary science and lessons learned from the *Deepwater Horizon* oil spill are incorporated into any final decision about whether and where to allow oil drilling in the Chukchi Sea. BOEMRE should analyze new information from the spill that is still being developed by, for example, the Presidential commission on the *Deepwater Horizon* spill.

- As the *Deepwater Horizon* spill taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences. The *Deepwater Horizon* spill also demonstrates that we need to know the environmental effects of offshore drilling before it begins.
- BOEMRE should not move forward with any oil drilling plans for the Chukchi Sea until all necessary science is collected and lessons are learned from the *Deepwater Horizon* spill. It is critical that all necessary science is collected and analyzed and incorporated into any decisions dealing with oil drilling in the Chukchi Sea. It is imperative that all necessary steps are taken to prevent another catastrophic oil spill from happening.
- The *Deepwater Horizon* spill has yielded significant new information and circumstances that are relevant to Lease Sale 193, which prompted CEQ to state that “[t]o the extent that the effects of a catastrophic spill have been projected or modeled, that analysis would have to be compared to the effects of this spill to provide current information to the decision maker.”
- Recent hearings on the *Deepwater Horizon* spill indicate that BOEMRE needs regulatory improvements and demonstrate that BOEMRE is not ready to proceed with offshore drilling in the Chukchi.
- It’s refreshing to see that the federal government has learned something from the *Deepwater Horizon* event, and has now included a VLOS scenario.
- The Draft SEIS is not consistent with the DOI’s offshore oil and gas program reforms that have been adopted in response to the *Deepwater Horizon* oil spill.
- The *Deepwater Horizon* oil spill shows that, even with the latest technology, oil spills do, in fact, occur during exploration. In addition, the spills analyzed in the original EIS—a 1,500 barrel oil spill from a production facility and a 4,600 barrel oil spill from a pipeline (193 FEIS at IV-19)—are less than 1/1000 the size of the *Deepwater Horizon* spill (estimated at close to 5,000,000 barrels of oil by the Presidential commission investigating the *Deepwater Horizon* spill).
- BOEMRE must supplement its analysis of oil spill prevention and containment to reflect the lessons being learned from the *Deepwater Horizon* spill and its aftermath, including the effects of dispersants.
- One commenter advocated for elaborating on existing discussion of the *Deepwater Horizon* spill in light of inevitable legal challenges to the document.

Source of Comments

This issue was raised in nearly all comments opposing offshore oil and gas activities or disapproving of Lease Sale 193 (or the SEIS specifically). This issue was also raised in several comments supportive of offshore oil and gas activities, Lease Sale 193, and/or the SEIS. The specific issues used in the Summary of Comments subsection above are taken from following sources:

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

The *Deepwater Horizon* tragedy and the events of the 2010 summer have resulted and will continue to result in substantial organizational changes and new policies designed to improve regulatory

oversight of human safety and environmental hazards. The ramifications of the DWH event for activities in the Chukchi Sea are discussed in detail within Section IV.D.1. The DWH event, along with public comments, also precipitated the Very Large Oil Spill analysis within this Final SEIS. Historically, BOEMRE and its predecessor agency have completed six VLOS analyses for the Arctic; one for the Chukchi Sea and five for the Beaufort Sea.

Issue 30. Coastal Zone Management programs and procedures.

Summary of Comments

One commenter on the Draft SEIS stated that the District Court's order to assess the potential impacts of gas development is a new requirement calling for assessment beyond that of the Sale 193 FEIS and, therefore, BOEMRE must prepare and submit to the State of Alaska a revised consistency determination for Lease Sale 193 with the Alaska Coastal Management Program (ACMP). The commenter asserted that a new component (a gas development scenario) has been added to the range of activities projected to result from the lease sale, and there is new information regarding potential impacts, which triggers the conditions for preparing a supplemental consistency review under 15 CFR 930.46(a)(2).

Another commenter on the Draft SEIS stated that in light of revisions to the ACMP, the concerns of villages may not be properly addressed.

On the Revised Draft SEIS, several commenters mentioned the need to update SEIS references to the ACMP, which met its sunset date (July 1, 2011) during the comment period. To this end, comments included the following:

- All references to the Alaska Coastal Management Plan should be removed considering the program met its sunset date.
- In light of the ACMP's expiration, Federal agencies should allow additional opportunities for boroughs to give input to Federal agencies.

One commenter asserted the loss of the ACMP constitutes significant new information that is relevant to:

- Evaluating data gaps
- Considering lease sale alternatives
- Designing and requiring mitigation measures
- Analyzing the VLOS scenario
- Analyzing the natural gas development and production scenario

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Groups
- General Public

Response to Comments

Consistency Review on Sale 193 FEIS. BOEMRE submitted a Coastal Zone consistency determination to the State of Alaska, which concurred that Lease Sale 193 is consistent with the enforceable policies of the ACMP on October 30, 2007.

ACMP Sunset. The ACMP was established pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended (16 U.S.C. §§ 1451-1464). The CZMA does not require a State to have a coastal management program, but encourages coastal states to voluntarily develop comprehensive programs to manage and balance competing uses of and impacts to coastal resources. The ACMP is no longer in force. The State of Alaska did not pass legislation to extend the ACMP, allowing the ACMP to sunset at 12:01 AM, Alaska Standard Time on July 1, 2011. With the termination of the ACMP, there are no enforceable standards to base a consistency review of federal coastal development activities. No state or federal agency will take over or assume the function and responsibilities for coastal zone management in Alaska. BOEMRE has considered the commenter's view and does not find the loss of the ACMP to represent any significant new information or changed circumstances that warrant further supplement of the SEIS.

The CZMA congressional authority for a coastal management program does not extend to a borough or other local government within the State of Alaska. Nonetheless, BOEMRE remains committed to working collaboratively with interested local governments on issues affecting coastal areas and communities.

Issue 31. Energy policy considerations.

Summary of Comments

Many comments expressed opinions on the role, if any, of Chukchi Sea hydrocarbon resources within the nation's energy policy.

Comments supporting affirmation of the lease sale referred to one or more of the following themes:

- The federal government must do more to develop a balanced energy policy that creates jobs, helps stabilize energy prices, and reduces imports.
- The resource potential of the Alaskan OCS is world class and exceeds the combined resource estimates for the Atlantic and Pacific OCS. According to the resource estimates, including those performed by USGS, Alaska's OCS may hold as much as 27 billion barrels of oil and 132 trillion cubic feet of natural gas.
- Developing Chukchi Sea resources would strengthen domestic energy security, help industries that rely on crude oil and natural gas, and alleviate energy price volatility, economic stagnation, and the high unemployment rate.
- High volumes of foreign energy imports transfer significant income to other countries, wealth that could be invested domestically.
- Shifting towards alternative sources of energy will take time and the nation requires additional domestic supply in the interim.
- Countries that are economically weakened have difficulty protecting their environment.
- The U.S. needs a constant supply of new discoveries to replace declining production and meet growing needs.
- Alaska OCS development is critical to maintaining a sufficient flow rate through TAPS to avoid corrosion, complex and costly maintenance, and premature decommissioning.
- Alaska OCS development would elongate the life of the TAPS pipeline, leading to lower pipeline tariffs, a more robust and lower cost service industry, reduction of certain refining costs, and longer-lived onshore facilities.
- TAPS has been identified as critical infrastructure for national security because of the transportation link that it provides to present and future development of crude oil resources in Alaska's Arctic region.

- Access to the Alaska OCS could increase the feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48 States.
- It is possible to strike a balance in the Arctic between responsible oil and gas production and environmental, social, and cultural values.
- Rescinding the leases would allow a de facto moratorium to continue, without a corresponding benefit to the environment.

Many other comments objected to the pursuit of more hydrocarbon-based resources, often expressing a preference for various forms of renewable energy (e.g. solar, wind, algae, hydroelectric, geothermal, etc.) instead. For example:

- BOEMRE should work with the Department of Energy to develop a national energy policy that, over time, would result in a shift away from our reliance on oil and gas development in high-risk areas.

Some commenters rejected the notion that TAPS is in danger of decommissioning:

- The oil industry's own data (used in a recent court decision in Alaska) states that TAPS is in no danger of shutting down and will operate until 2047.
- There is 50 years worth of oil in the Lower 48, and enough shale on the North Slope to keep the pipeline operating through 2074.

Several related comments stated that the oil industry produces a wide variety of negative externalities borne by ordinary citizens.

One comment suggested that BOEMRE should adopt a slower, phased approach that limits initial operation to one or two active lease sales at a time.

Another comment challenged the resource estimate for the Chukchi Sea Planning Area as fantastic, largely speculative, and subject to change. This comment also asserted that even if current estimates of recoverable volume prove correct, the nation's annual dependence on foreign oil would be reduced by only single-digit percentage points.

Sources of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Limited Scope of Analysis. While national issues such as volatile energy prices, economic stagnation, high unemployment rate, dependence on imported energy, etc. are important, they exceed the scope of the environmental analysis in the SEIS. BOEMRE considers issues related to access to offshore energy supplies during development of each Five-Year Leasing Program.

Resource Potential. As acknowledged in the SEIS, BOEMRE's current petroleum assessment indicates a mean technically recoverable oil resource of roughly 15 billion barrels (Bbbl) with a 5% chance of about 40 Bbbl (USDOJ, MMS, 2006e). The mean undiscovered gas resources total 76.77 trillion cubic feet (Tcf) with a 5% chance of 209.53 Tcf. More detailed information on resource estimates is provided in the paragraphs below.

The 2006 and 2011 resource assessments of the Chukchi Sea, Beaufort Sea, and Hope Basin planning areas forecast identical quantities of undiscovered technically-recoverable resources. The technically-recoverable resources represent the recoverable hydrocarbon *endowment* partitioned among many hypothetical pools ranging in volume from very small to very large. Both the 2006 and 2011 BOEMRE studies forecast an *average* undiscovered endowment of 23.75 billion barrels of oil and natural gas liquids and 109.19 trillion cubic feet of gas, but ranging up to a *maximum* undiscovered potential (5% probability to exceed) of 53.17 billion barrels of oil and natural gas liquids and 247.19 trillion cubic feet of gas (source: http://www.alaska.boemre.gov/re/reports/2006Asmt/2006_Assessment_Risked_Tables.pdf). Therefore, the recoverable resource endowment could easily far exceed the quantities noted in the comment.

Only a fraction of the resource endowment will be economically recoverable, and this fraction fluctuates with assumptions for future price paths, development scenarios, costs, and other economic factors that vary with world economic conditions. The 2011 BOEMRE economic assessment used ranges of current price and cost scenarios, but the most representative model forecasts *averages* of 17.82 billion barrels and 50.15 trillion cubic feet of undiscovered economically-recoverable oil and gas (for the particular case where oil price = \$110/bbl and gas price = \$7.83/Mcf [gas discounted to 40% of oil value on an energy basis]; source: <http://www.boemre.gov/revaldiv/ppt/2011PacificAAPGPresentation.pps>).

The 2008 assessment of circum-Arctic petroleum resources by the U.S. Geological Survey (<http://pubs.usgs.gov/fs/2008/3049/>) concluded that the Arctic Alaska “assessment unit”, which combines offshore and onshore (North Slope) areas, offers a mean technically-recoverable resource endowment of 35.87 billion barrels of oil (and natural gas liquids) and 221.40 trillion cubic feet of gas. Although the reported quantities among these independent assessments over time differ in detail, they all conclude with a shared view that the Alaska Arctic offers great potential for undiscovered oil and gas resources.

Undiscovered Resources. While the Chukchi Sea Planning Area could contain large amounts of oil and gas (see estimate above), its resources are currently considered undiscovered. Undiscovered resource potential is not the same as proven reserves. Undiscovered resources have not been located and, when discovered, they must be feasible to develop to become producing fields. Reserves are proven oil and gas accumulations that are feasible to recover with a profit acceptable to the field operator. Typically, a large portion of the petroleum potential could occur in accumulations that are too small, too hard to identify, or too costly to develop. This portion of the resource potential is unlikely to become producing reserves, because companies will not purposely develop uneconomic projects. Additional information obtained through exploration seismic surveys and drilling in the Arctic OCS would increase our knowledge of the resource potential and support better informed decision making.

Other Inputs to TAPS. The amount of oil in the Lower 48 is not very relevant to the challenges of keeping TAPS operational. TAPS operator (Alyeska Pipeline Company) issued a report in June 2011 that discussed a number of problems with pipeline operation at flow rates below 500,000 barrels per day. Present flow is slightly over 600,000 barrels per day, so the problems will start within years, not decades. Petroleum assessments of the North Slope and adjacent OCS indicate that these areas have a very high potential for oil and gas fields. However, this petroleum potential is undiscovered and it will take aggressive leasing, exploration and development to produce real oil to fill TAPS. Lease Sale 193 is just the first step in the process to discover and develop new oil fields.

TAPS operator (Alyeska Pipeline Company) issued a report in June 2011 that discussed the challenges facing the pipeline system because of low flow rates. Current flow through TAPS is approximately 600,000 barrels per day (only 1/3 of the peak flow in 1988). A number of problems start to occur at flow rates less than 500,000 barrels per day and the pipeline may not be operational at

flow rates of 300,000 barrels per day or less. Production rates are dropping by approximately 5% per year, which means that TAPS could reach these design limits within the next 10-15 years unless new oil supplies are added. The Beaufort and Chukchi OCS provinces have the potential for very large oil fields that could keep TAPS in operation many decades into the future.

Development and Production. Evaluation of the potential effects of oil development and production was addressed in the Sale 193 FEIS and is incorporated by reference in the SEIS. The Sale 193 FEIS acknowledges the declining throughput of TAPS. Section V.B.8 of the cumulative analysis in the Sale 193 FEIS discusses the potential input to TAPS from Chukchi Sea oil production:

The scenario for new petroleum development in the Chukchi Sea was postulated in view of the existing infrastructure on the North Slope because it is likely that future projects in northern Alaska will be tied into these facilities. The TAPS is assumed to carry oil production from the Chukchi which could begin in 2020 (Table V-6). Peak oil production rate from the first offshore field is assumed to be approximately 225,000 bbl per day and would constitute a 25% increase to the current rate through TAPS. (Sale 193 FEIS, Section V.B.8., p. V-10)

As discussed in the Sale 193 FEIS and SEIS, BOEMRE does not expect full-scale natural gas production from the Chukchi Sea or available capacity in the proposed natural gas sales line until at least 2030. Natural gas production from the OCS would be expected to extend the productive life of such a pipeline.

Pace of Leasing. BOEMRE administers OCS leasing, exploration, and development and production as mandated by the OCSLA. Congress amended OCSLA in 1978 to provide for the “expedited exploration and development of the Outer Continental Shelf . . .” 43 U.S.C. 1802(1). Consequently, the pace of leasing is determined by the OCSLA provisions requiring 5-year planning intervals. Given this mandated planning interval, leasing, exploration, and development and production activities in the Arctic have proceeded slowly. Lease sales have been held in the Arctic OCS since 1979, and a total of 15 Arctic OCS lease sales have resulted in 2,351 leases. Of these, all leases from 5 lease sales in the Beaufort Sea Planning Area and 2 lease sales in the Chukchi Sea Planning Area have expired. There are 186 current leases remaining in the Beaufort Sea Planning Area and 487 current leases resulting from Lease Sale 193 in the Chukchi Sea Planning Area; the latter have been suspended pending a final decision and conclusion to this SEIS process. As a result of all leasing in the Arctic OCS since 1979, a total of 35 exploration wells (30 in the Beaufort Sea and 5 in the Chukchi Sea) have been drilled. Only one field—Northstar—has been developed and is producing oil, and one other field—Liberty—is being developed. The Northstar facility is not located within the Arctic OCS; it is in State waters. Therefore, given the existing requirement to assess leasing opportunities at 5-year intervals combined with the historically slow pace of development activities in the Arctic, BOEMRE is confident in its ability to manage resources safely and responsibly.

While the pace of leasing in the Arctic may be slow, and the approach of the Department to this region cautious, the notion that a de facto moratorium exists is false. BOEMRE, Alaska OCS Region and the Department of the Interior have proceeded expeditiously and in good faith while discharging their duties under the OCSLA.

Alternative Energy. Information on alternative energy initiatives is provided in responses to Issue Category 32, below.

Issue 32. Preference for energy alternatives and conservation.

Summary of Comments

Many comments expressed preferences for other means to meet energy demands, aside from development of offshore resources. Most of these comments suggested that the federal government invest in other energy sources (particularly renewable sources of energy such as solar, wind,

geothermal, tidal, etc) and/or increase its emphasis on energy conservation. Further, these comments suggested that renewable energy is an emerging industry that can provide good jobs for workers currently in the oil and gas industry, as well as others. Other comments expressed a preference for exhausting onshore oil and gas resources prior to venturing offshore.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Environmental Organizations
- General Public

Response to Comments

Comments asserting a preference for other energy sources are beyond the scope of the current analysis. In accordance with the District Court remand, the SEIS provides in-depth analysis of the most viable natural gas development and production scenario for the Chukchi Sea, of a hypothetical VLOS scenario, and of incomplete information identified in the Sale 193 FEIS. Alternatives to OCS oil and gas leasing to meet the Nation's energy needs is a programmatic issue, which was addressed as the No Action Alternative (Alternative 10) in the Final EIS for the 2007-2012 5-Year Program (USDO, MMS, 2007c:Section IV.K). BOEMRE administers OCS leasing, exploration, and development as mandated by the OCS Lands Act. Congress amended OCS Lands Act in 1978 to provide for the "expedited exploration and development of the Outer Continental Shelf . . ." 43 U.S.C. 1802(1). On the Alaska North Slope, the Bureau of Land Management has mandated responsibility for the oil and gas program in the National Petroleum Reserve – Alaska under the Naval Petroleum Reserves Production Act and the Federal Land Policy and Management Act. The State of Alaska manages oil and gas leasing and operations on state lands of the North Slope.

While renewable energy sources currently play a role in meeting energy demands in this country, and will continue to do so in the future, such sources could not replace the energy supplied by oil and gas in the OCS. The DOI and BOEMRE continue to move forward on renewable energy. More information on the OCS Renewable Energy Program is available at: <http://www.boemre.gov/offshore/RenewableEnergy/index.htm>.

Issue 33. Very Large Oil Spill (VLOS) Scenario

Summary of Comments

BOEMRE received positive feedback for the decision to incorporate analysis of a Very Large Oil Spill (VLOS) within the SEIS. The treatment of spill response and cleanup in the SEIS proved to be the most controversial topic and is treated separately in Issue Category 35. Specific comments on the scenario itself generally took the form of either requests for additional information or requests for clarification:

- The SEIS should more clearly explain the definition of a VLOS and the volume of the VLOS being considered.
- A variety of technical comments were made on the AVALON/MERLIN software used to model a flow rate for the hypothetical VLOS.
- BOEMRE should follow all of the recommendations of the National Commission on the BP Deep Water Horizon Oil Spill and Off Shore Drilling, no matter what the water depth of a particular project.
- Failure to share information such as the GPS coordinates of the VLOS well breeds distrust.

One comment requested that BOEMRE clarify the term “known prospect,” and explain why BOEMRE chose this particular geologic formation and the limits of the analysis (e.g. if there is no oil in the formation, then there is no chance of VLOS).

Some comments requested that the SEIS do more to contextualize the risk of a VLOS. These comments asserted that, as written, the SEIS may overemphasize the potential for a VLOS, and decision makers may overweigh the risk of this low probability event. These comments went on to suggest the following changes to the SEIS:

- Make clear that regulatory standards exist that could prevent or mitigate an oil spill and that this hypothetical scenario assumes that everything that could go wrong, would go wrong.
- Clearly and succinctly define the VLOS scenario as extreme, entirely speculative, and exceedingly improbable.
- Highlight the extreme assumptions used to construct the VLOS scenario to better contextualize the probability of such an event occurring in the real world.
- Use the terminology “low frequency” rather than “low probability” to describe the likelihood of blowouts or VLOS events.
- Duplicate or at least summarize within Section IV.D the quantitative assessment/probabilities analysis contained within Appendix B.

BOEMRE was also asked to clarify whether the VLOS scenario is a “reasonably foreseeable impact” or a “remote and speculative impact”. Conversely, many comments referred to a VLOS in the Chukchi as an “inevitable” consequence of exploration there.

One comment stated that Table B-1 should include data from the DWH event, and that totals should be recalculated.

One comment found use of the term “*any* known prospect” confusing, as follows:

- The phrase could suggest to the reader that any prospect in Lease Sale 193 area has the potential for a VLOS of the type modeled.
- Other known and mapped prospects do not have the physical capacity to flow at the rate analyzed.

Another comment asserted that the VLOS scenario should be site-specific and “not use information from the Gulf.” The commenter states that the “flow rate estimates are 40,000 to 50,000 gallons or barrels off, as compared to actual drill plans for the Chukchi.” The suggestion is that it is like comparing apples to oranges.

One comment stated that the VLOS scenario should use analog reservoirs that are actually known to contain oil. This same comment notes that at the lease sale stage, information on what oil or gas reservoirs may produce during a VLOS are inherently speculative. Reservoirs will be better studied and understood by the time of exploratory drilling.

One comment criticized BOEMRE’s methodology for modeling the flow rate for the VLOS scenario. This comment requested modeled flow rates for three to four different types of oil.

Several comments suggested that the SEIS better emphasize the distinction between a VLOS and a WCD. They stated it should be made more clear that the VLOS discharge volume is being calculated solely for the purpose of determining the environmental effects of an uncontrolled oil well blowout, and that it has no direct relationship to the WCD considered in exploration plan scenarios.

Several commenters took issue with the length of time to stop the flow of oil posited by the VLOS scenario (i.e. pinpointing when the flow of oil would cease). Relevant comments include:

- It is important that the public also understand that the analysis presented in the SEIS does not take into consideration an operator's ability to respond immediately to an emergency that results from a well control situation in the Chukchi Sea.
- The decision maker should understand that the VLOS scenario is not really the worst or most extreme case, because weather, ice, darkness and other constraints could prevent the completion of a relief well prior to winter setting in. It must be understood that late season relief well drilling may not be feasible; this argues for provision of a dedicated relief well vessel in close proximity to exploration wells.
- Use of the original vessel to drill a relief well should not be presented on equal terms with bringing in a second vessel. Immediate use of the original vessel to drill a relief well is not consistent with industry standards, which (following a blowout) require an examination of the rig before resumption of any drilling. Also, history shows that blowouts lead to rig evacuations and a rig that is unable to drill a relief well. These limitations should be noted.
- Regarding the relief well vessel, more explanation of "weather downtime" should be provided. BOEMRE should explain the "previous operations" that were considered, whether these are applicable in the exploration drilling context, and whether these limitations apply equally in late season drilling.

Many commenters insisted that BOEMRE analyze the missing or incomplete information regarding the effects of a VLOS. Some of these comments specifically invoked 40 CFR 1502.22. One of these comments asserts that the VLOS discussion does not acknowledge incomplete information relevant to the analysis, and therefore violates 40 CFR 1502.22.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Defining the VLOS. In order to inform the public and decision makers about the potential effects of OCS activities, past NEPA documents prepared by BOEMRE have analyzed a variety of hypothetical oil spills. Among other factors, these scenarios have varied by source and volume. BOEMRE's NEPA documents have categorized oil spills of differing volumes by creating categories of "small", "large" and "very large", which are defined as <1,000 barrels (bbl), ≥1,000 bbl, and ≥150,000 bbl, respectively. At approximately 2.2 million bbls, the hypothetical oil spill analyzed in this SEIS falls clearly in the category of a very large oil spill (VLOS).

The purpose of including a VLOS scenario in this SEIS is stated in the first sentence of Section IV.D: to analyze "[the] potential environmental effects of a low-probability, high impacts event." This exercise is consistent with a recommendation from an August 16, 2010 report from the Council on Environmental Quality pertaining to NEPA analysis of OCS activities. This report is described in relevant part within Section IV.D.1 of the SEIS. Specifically, CEQ recommended that BOEMRE "ensure that NEPA documents provide decision makers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities" on the OCS.

It is not necessary to clarify whether the VLOS scenario is a “reasonably foreseeable impact” or a remote and “speculative impact”. What is important in this NEPA document is to evaluate and communicate the potential environmental effects of such a scenario.

Spill Duration. It is acknowledged in Section IV.D.3 of the SEIS that the estimate of 74 days is “conservative”, as it does not take into consideration “the variety of other methods that would likely be employed to halt the spill within this period.”

Meanwhile, it is also acknowledged in Section IV.D.3 that, “The availability and effectiveness of [spill intervention and response] techniques may vary depending on the nature of the blowout as well as seasonal considerations, including the seasonal presence of sea ice.” In response to comments, this language has been enhanced to highlight the special considerations attendant to late season drilling. It should be noted that the adequacy of proposed spill response capabilities is evaluated on a plan-by-plan basis at the exploration plan or development and production plan phase. Those analyses account for seasonal considerations.

Frequency of a VLOS. Section IV.D.1 of the SEIS provides the public and decision maker with adequate context as to historical rates for well control incidents and oil spills on the OCS. Readers interested in a more in-depth treatment of this topic are referred to Appendix B of the SEIS. History clearly shows that such events are infrequent, yet possible. BOEMRE must reject commenter’s requests that the SEIS characterize a VLOS as either “inevitable” or “entirely speculative”.

Additional, prospective quantification of rates for Chukchi Sea development are outside the scope of this environmental effects analysis. It should be noted that past OCS incident rates are not a precisely accurate indication of future rates, especially in light of the additional safety measure developed in the wake of the DWH event. Rates could also vary by the particular activity and technology associated with each specific proposal. BOEMRE has included the percentages in addition to the actual numbers of OCS well control incidents releasing hydrocarbons (crude, condensate and drilling mud oil) in Section IV.D.1 and Appendix B, Section 1.1.

The VLOS analysis does not estimate the chance of a VLOS occurring but rather assumes a VLOS occurs for purposes of analysis. Appendix B, Section 1.3 states that the frequency of OCS well control incidents spilling fluids $\geq 150,000$ bbl from 1971-2010 has not exceeded the frequencies used in the fault tree analysis for the Sale 193 FEIS oil spill analysis. The estimates of one or more large oil spills occurring from the proposed action and its alternatives in the Sale 193 FEIS using rates from the fault tree analysis remain valid when considering the OCS well control data from 1971-2010.

BOEMRE agrees that there could be subtle inferences regarding the terminology of frequency versus probability. The use of the term probability by BOEMRE is not meant to infer that efforts to reduce the chance of a VLOS occurring would not take place. Recent safety measures, implemented by both BOEMRE and industry, are intended to reduce the frequency or probability of a VLOS even further and are discussed in IV.D.1.

Flow Rate Modeling Software. The *AVALON/MERLIN* model used to estimate oil discharges from an uncontrolled well is a deterministic simulator that *does not* conduct Monte Carlo sampling of input probability distributions. However, consistent with the “worst-case” philosophy that governs VLOS and WCD determinations, the input values for key variables are designed to assess “high-side” cases that are constrained only by the limits of geological or physical reality. Many of the key input variables that are not proprietary are listed in table D-2 of SEIS Appendix D. In practice, the “worst-case” modeling philosophy cannot supersede obedience to the basic laws of physics as well as certain internal dependencies among variables that are also dictated by physics. For example, a black oil (no free gas) reservoir cannot be assumed to contain more dissolved gas than that permitted by the reservoir temperature, pressure, and certain fluid characteristics that ultimately control solubility. Oversaturation as a stable condition is not possible because any excess gas in the oil escapes from the

solution state and bubbles out to form a free gas phase that gathers in a gas cap. If the presence of a gas cap were assumed at the VLOS well, it would subtract from the thickness of the oil column available to feed an oil discharge. Contact with a free gas column is disallowed at the VLOS well. Therefore, the Chukchi VLOS model assumes that any gas cap is distant and that the oil at the well is saturated, i.e., it contains the maximum possible quantity of dissolved gas. The assumption of saturation in turn drives higher discharge rates. At total (gas) saturation, physics dictates that the viscosity of the oil is *minimized* and this has the “worst-case” effect of *maximizing* oil discharge rate. Because of the physical dependencies among these variables, one cannot just assume some value for oil viscosity that is even lower than the minimum value forecast by the pressure, temperature, and saturation conditions of the reservoir. Physical laws require this internal consistency and the *AVALON/MERLIN* model is in fact designed to test and consistency-check the correlations among interdependent input variables.

Operationally, the *AVALON/MERLIN* model divides the subsurface reservoir into many small cells that surround the VLOS wellbore. A simulation iteration begins with the extraction of a volume of fluid over a user-specified time increment (at the outset usually specified at 0.1 days, but possibly adjusted downward to 0.001 days if deemed useful based on model behavior) from the “initial” cell that is penetrated by the VLOS wellbore. The volume of fluid extracted over the specified time increment is dictated by the physical properties of the reservoir and the pore fluid as well as the frictional resistance to outflow imposed by the wellbore tubulars. The first extraction event immediately changes all of the properties (i.e., the initial model input variables) of the “initial” cell, mostly pressure and the pore fluid properties that are in turn controlled by pressure, temperature, and fluid composition. (The fluid composition will change as gas exsolves in the reservoir and preferentially escapes to the wellbore.) The changes in the “initial” cell will affect the adjoining cells in ways governed by physics. The effect of extracting fluid at the wellbore is mathematically spread throughout the entire cell network, which may cover thousands of acres. In the next iteration, a second volume of fluid is extracted from the initial cell over the same time increment, and the entire process of adjusting cell properties across the cell network is repeated. The iterations continue out to the end of the desired model discharge period, usually 180 days or greater. Cell size is determined by the user. Near the wellbore, cells ~200 ft along an edge typify the VLOS and WCD models to date. Small cells provide highly accurate answers, but may require very lengthy runs because of the vast numbers of cells if established at equally small dimensions throughout the network. A common modeling practice is to enlarge the dimensions of cells at increasing distances from the wellbore and toward pool boundaries where the incremental changes are much smaller than at the “initial” cell at the wellbore. A balance between required accuracy and reasonable run times is sought. The *AVALON/MERLIN* model offers two approaches to partitioning the reservoir into cells: 1) radial, where the cells are concentric about the wellbore; and 2) rectilinear, where the reservoir is partitioned into cubic or prismatic cells. Both approaches to reservoir partitioning are usually conducted as an internal cross-check and generally produce very similar results.

Volume of DWH Event. BOEMRE included the *Deepwater Horizon* well control incident in Table B-1, but not the volume. The footnote states that the final volume for the *Deepwater Horizon* that occurred on April 20, 2010 has not been determined by BOEMRE. Using the 4,900,000 bbls from McNutt et al. (2011), the volume spilled from well control incidents from 1971-2010 on the OCS was 4,901,828.85 bbl.

Location of VLOS Reservoir. The specific geographic location of the VLOS well is not revealed in the SEIS. This is because the VLOS model data that is provided in table D-2 of Appendix D of the SEIS, when coupled with the geographic location, would represent a breach of private information, akin to releasing a “trade secret,” that is held in trust by the BOEMRE. A critical part of the data set for the Chukchi Sea consists of seismic data that were gathered at great expense by industry entities in response to past promises of future lease sales. Without this data, no wells could have been drilled

and the geology of the Chukchi Sea would today remain virtually unknown. The gathering of the costly seismic data represents a private investment and the information extracted from these data is classified as *proprietary* to the parties that paid for the data. A public disclosure of this information could cause grave financial harm to the data owners by destroying the value of the data and/or compromising the competitive advantage that was gained by the investment in gathering the data. For this reason, seismic data are even sometimes the targets of theft. From a regulatory standpoint, specific Federal laws forbid the disclosure (by either Federal employees with authorized access or others) of proprietary data to any parties other than the data owners. Severe criminal penalties to agency employees can result from intentional release of proprietary data (Outer Continental Shelf lands Act, as amended [43 U.S.C. 1331]; Federal Oil and Gas Royalty Management Act of 1982 [30 U.S.C. 1701]).

Description of VLOS Reservoir. A thorough description of how BOEMRE developed the VLOS scenario is provided in Section IV.D.2 of the SEIS. Additional background information on this exercise is available in Appendix D.

Commenters are correct in pointing out that very few known and mapped prospects in the Chukchi Sea have the potential, even in greatest geological extremity, to yield oil discharges approaching that of the VLOS model described in Appendix D. The Chukchi Sea VLOS is constructed as an extreme case that is based upon a single prospect that offers the rare combination of the *potential* (but unproven) characteristics that promote an extreme VLOS event, notably great reservoir thickness and high permeability. Although these key traits *could* be found at the VLOS prospect, neither of these key characteristics *is likely* to be realized *as modeled* at the selected prospect. And, at many prospects, it is simply geologically impossible to achieve the characteristics or discharge volumes of the SEIS VLOS. BOEMRE finds the existing language in the SEIS, which clearly refers to a single prospect, to be unambiguous. No confusion on this point was reported or observed at any public meetings.

The reservoir formation at the VLOS well is not revealed because when combined with other information that is provided in Appendix D could constitute a disclosure of proprietary data. However, the VLOS reservoir formation is associated with commercial production in the central North Slope of Alaska and some publicly-available analog data from that information source was incorporated into the VLOS model.

The VLOS prospect reservoir is unexplored except through seismic imaging. It is acknowledged in Appendix D that the prospect is *not known* to contain high-quality reservoir rocks or “flow units” capable of supporting flow of hydrocarbons to the wellbore. However, the reservoir formation is identified through seismic mapping and does offer substantial gross thickness in the capture volume at the VLOS prospect. Furthermore, the VLOS reservoir formation is known to include potential flow units at other sites in the greater Alaskan Arctic. Although the pore system characteristics of the reservoir formation are not known at the particular Chukchi Sea VLOS site, it seems likely that some part of the substantial gross reservoir formation thickness may include porous and permeable strata capable of flowing pore fluids to a wellbore. Flow rate is proportional to aggregate thickness of flow units, so a great gross thickness is a necessary first condition to achieving a high VLOS discharge rate. Secondly, as several commenters point out, the VLOS prospect reservoir formation is not known to contain hydrocarbons. However, the VLOS prospect is favorably located to receive migrating hydrocarbons from nearby areas of thermal generation of petroleum. These important geological risk factors are acknowledged to decrease the *likelihood* of a VLOS discharge but do not have any analytical role in establishing VLOS discharge *volumes*. The VLOS model assumes the condition that capable flow units that are saturated with oil are present within the prospect. Related discussions of issues related to probability and oil spills are offered in the responses to Issues 28, 33 and 34.

Flow Modeling. The VLOS scenario for the SEIS was created for a specific prospect in the Lease Sale 193 area of the Chukchi Sea (see Figure D-1, Appendix D of the SEIS). The geologic data base that supports the VLOS model was constructed from information gleaned from a seismic data network of ~100,000 line miles of two-dimensional seismic data, a localized three-dimensional seismic survey, the 5 wells drilled in the 1989-1991 phase of Chukchi Sea drilling, relevant wells onshore, and publicly-available data from producing oil fields in the Prudhoe Bay area. No data or blowout events from the Gulf of Mexico were used to construct the Chukchi Sea VLOS. In Appendix A of the Sale 193 FEIS, OCS oil spill statistics are used in a fault tree model to estimate the probabilities of oil spills occurring. The estimates include various size categories from platforms/rigs and pipelines based on the Lease Sale 193 exploration and development schedule. The oil discharge rates and the aggregate oil discharge over the maximum period (74 days) required to drill a relief well and “kill” the blowout well are both reported in barrels (1 barrel=42 U.S. gallons). These quantities (maximum rate, 61,672 bbls/day; 2,160,200 bbls over 74 days) represent extremely high but extremely improbable results from a locality-specific geological model that was designed to serve as a basis for evaluating a “worst-case” scenario for environmental harm.

The modeling of tubing hydraulics is primarily based upon the casing and open-hole designs for the well and the properties of the fluids ascending the wellbore. The lengths and roughness characteristics of the tubing components control the frictional opposition to fluid flow. The properties of the fluids evolve as they rise through the tubing in response to changes in pressure and temperature, primarily related to the exsolution of dissolved gas into a separate phase. The “tubing” model accounts for all of these variables. The Chukchi VLOS model assumed the presence of 9.625-inch-diameter casing (8.535 inches interior diameter) to an unspecified depth above an open-hole segment 11 inches in diameter (enlarged by washout from a drill diameter of 8.5 inches) and terminating at a total depth of 9,000 ft. The lengths of the cased-hole and open-hole wellbore segments for the tubing model are not provided because that information reveals the depth interval of the reservoir formation as interpreted from proprietary seismic data. The *AVALON* nodal analysis program offers a selection of six published industry-standard correlations for calculating the “tubing curves” (models for variation of fluid flow rate with flowing bottom-hole pressure) for vertical wellbores. The six correlation models for vertical wellbores include the following: Beggs & Brill (oil), Hagedorn & Brown (oil), Duns & Ross (oil), Orkiszewski, Gray & Ross (gas condensate reservoirs), and Cullender & Smith (gas reservoirs). There are also corresponding correlations for horizontal or inclined flow paths. The Chukchi Sea VLOS model utilized only the correlations for vertical tubing; the Beggs & Brill correlation for oil that is commonly used by industry is preferred. *AVALON* also provides a selection of correlations for predicting and generating the temperature- and pressure-variant physical properties of reservoir fluids. These include the published industry-standard correlations of Standing, Vazquez and Beggs, and Lasater. For VLOS models to date, Standing’s correlations have been preferred. Other correlations produce similar results, but some produce better matches to laboratory data for particular oil types (not available for the Chukchi VLOS model) and are preferentially adopted in such cases.

VLOS vs. WCD. A strong explanation of the differences between a VLOS scenario and a Worst Case Discharge (WCD) analysis is provided in the second paragraph of IV.D.2. This distinction was also emphasized at each public meeting explaining and soliciting comments on the Revised Draft SEIS. Additional emphasize of this point is not deemed necessary to include in the body of the document but will be provided as a response to comment below.

The concept behind the “VLOS” or very-large-oil-spill is similar to that driving the analysis of “WCD” or worst-case-discharge events in that they are intended to represent low-probability/high-volume events bearing extreme potential consequences. The VLOS analysis is conducted to provide a real-world basis for a release of a very large quantity of oil into the marine environment for the purpose of assessing environmental harm. It is recognized that the probability of a VLOS-scale

discharge event is very low and a consideration of probabilities is offered in Appendix B of the Final SEIS. The low “geological” chance that the exploration well will successfully locate a large oil accumulation, coupled with the observed low incidence rates for accidental discharges in the course of actual drilling operations, predicts a very small, but not impossibly small, chance for the occurrence of a VLOS event. But this consideration of probability is not, nor should it be, integrated into the VLOS model. The VLOS discharge quantity is “conditioned” upon the assumption that all of the necessary chain of events required to create the VLOS actually occur (successful geology, operational failures, oil escaping confinement measures, oil reaching the marine environment, etc.). The VLOS discharge quantity is therefore not “risky” or reduced in deference to the low probability for the occurrence of the event.

Incomplete Information. It is not necessary to conduct additional 1502.22 analysis of any incomplete information identified in the VLOS analysis. BOEMRE wrote the Final SEIS in compliance with the requirements of 40 CFR 1502.22. The types of procedural deficiencies within the Sale 193 FEIS that formed the basis for the second and third concerns of the District Court’s remand do not recur within the SEIS. There are no unexplained statements regarding incomplete information made within the VLOS analysis of the SEIS. BOEMRE found that any incomplete or missing information that could be relevant to “reasonably foreseeable significant adverse effects” from a VLOS is not “essential to a reasoned choice among alternatives.” Because there is no incomplete information “essential to a reasoned choice among alternatives,” determination of “whether the cost of obtaining the missing information is exorbitant, or the means of doing so unknown,” is not necessary as per the requirements of 1502.22.

To illustrate these points with an example from the Final SEIS, consider analysis of potential impacts to bowhead whales provided in Section IV.E.7. There, BOEMRE makes clear that there is a lack of detailed studies regarding the effects of an oil spill on free-ranging populations of marine mammals. Having identified this incomplete information, BOEMRE then thoroughly addresses its relevance to the decision-making process and eventually determines that the information is not essential to a reasoned choice among lease sale alternatives.

Issue 34. Oil Spill Trajectory Modeling

Summary of Comments

Several commenters found the VLOS analysis confusing, stating that it does not give a clear picture of what an oil spill would look like or how it would affect our ocean or coast. For instance, the scenario should provide more detail on what the oil plume would look like, as well as more detail (i.e. smaller numerical ranges) on how much coastline would be affected. For example:

- The SEIS should feature meaningful animations of where the oil spill would spread from various drilling sites, pipelines, and tankers (including those used for well testing, fuel hauling, and oil spill cleanup tankers).
- The VLOS trajectory modeling does not provide info regarding how a VLOS would impact coastal villages in the Northwest Arctic Borough.
- There is a need for geospatially explicit spill trajectory models in order to evaluate cumulative environmental impacts of a VLOS on these communities.

Several comments alluded to a need for VLOS scenario to include more information regarding surface circulation and currents. For example:

- The Arctic ocean is cold and hydrocarbons do not evaporate out of it. A spill would travel with the circulating currents, and effects would recur over the long-term.
- The SEIS should consider the strength and variety of currents in the Chukchi Sea.

- The VLOS scenario should consider the many different currents in the Chukchi Sea, as well as the variable ice conditions.

A couple of comments expressed concerns about Appendix B. Suggested changes to the Sea Ice subsection include:

- Second sentence should also note the negative impacts of ice.
- Provide a time estimate for use of tracking devices and then collecting or burning oil after meltout. Include examples.
- The statement “In first year ice, most of the oil spilled...” should be better explained and supported.

Other suggested changes include:

- Re: Appendix B, Section 3. Instead of modeling only 35 API oil, the document should model at least three to four types of oil.
- Re: Table B-4: The document should explain why “Meltout Spill” was only considered until May 31, when in fact ice can be present into July.
- Section 2.2 seems to alternate between mm and cm. Should clarify whether this is a mistake or a subtle distinction.
- The statement in Appendix B, Section 4.1 that “For the purposes of analysis the oil could freeze into ice and melt out in the Arctic spring or summer” is too simplistic. Explain whether other possibilities were considered, and what happens to oil and its movements during freeze-thaw cycles.
- The Appendix B, page 9 discussion of factors not explicitly considered by the OSRA model should be moved to the introductory portion of Section 4.1 in order to make more clear at the outset how the model works.
- Appendix B appears to conclude that when the OCS well control data from 1971–2010 are considered, the fault tree analysis used in the Sale 193 FEIS remains valid. There, the frequency of a VLOS in the Chukchi Sea was estimated at 3.9×10^{-4} per well. This is highly relevant info that would help contextualize the VLOS analysis.
- The empirical rate of OCS incidents that have resulted in spills greater than 150k bbls is 1 in 41,781, or 2.39×10^{-5} per well—this should be made available to the reader.
- Only approximately 20% of OCS well control incidents result in the release of any liquid hydrocarbons. This is the more relevant number for public review, as opposed to total “OCS well control incidents.” Since the focus of the VLOS analysis is on an actual spill, BOEMRE should revise the text accordingly.

One comment referenced a phrase in the Severe and Extreme Weather section of Section IV.D.2, which mentioned “episodes of severe storms characterized by strong winds (25 to 30 mph)...” The comment noted that much higher winds have been recorded at Barrow.

Other comments expressed a variety of general concerns with the way the VLOS analysis was conducted and presented, or made suggestions for improvement, as follows:

- The VLOS scenario needs to include more information regarding surface circulation and currents.
- BOEMRE should clarify what the analysis of “the percent of trajectories from a long duration VLOS contacting” a resource (as opposed to “the percent chance of a large spill contacting” a resource, as used in previous analyses) tells decision makers and the public about the actual behavior of a VLOS.

- Reciting spill model results by environmental resource fails to inform distinctions between overall environmental effects caused by spills occurring in different areas of the lease sale.
- The VLOS scenario's discussion of shoreline oiling is inadequate. While it provides a composite of how much shoreline might be "discontinuously oiled" from a spill originating anywhere in the region under consideration, it does not provide sufficient information regarding environmental impacts from an oil spill originating in different areas.
- The VLOS analysis' description of the size and shape of an oil spill is flawed because it does not disclose whether or how slicks will behave differently if they originate in different areas, and how this may differentially affect resources and species.
- The VLOS trajectory analysis is inadequate because it assumes that oil spills do not spread, cannot contact multiple locations at once, and stop moving after landfall.
- The VLOS analysis does not provide understandable, mapped information that the public can decipher.
- The trajectory analysis does not allow the public to understand how the spread of oil could unfold from drilling in different parts of the leased areas and in different seasons. This information is necessary for comparison of spatial leasing alternatives and analysis mitigation measures.
- The trajectories were only done with an assumption for a limited period of time after the oil was spilled.

Sources of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Governments
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Additional Explanation. Appendix B of the Final SEIS incorporated by reference the introductory information about the oil spill trajectory model in the Sale 193 FEIS. For clarity, additional information from the Sale 193 FEIS has been included in Appendix B, Section 4 of the Final SEIS.

In response to comments, a figure of a shallow (< 60 m) subsea blowout with a hypothetical oil plume has been included in Appendix B, Section 2.1. Appendix B now includes a detailed table (Table B-29) showing individual launch areas and land segments from which the Section IV.D.2, Table 5 Length of Discontinuous Shoreline oiling was compiled from. In response to comments, additional information regarding the fate and behavior of oil in ice is included in Appendix B of the Final SEIS.

Consideration of Ocean Currents. The SEIS discusses circulation and currents in Section III.A.3 Physical Oceanography and additional information on surface circulation and currents was added. The oil spill trajectory model also uses current direction and current speed, and ice motion speed and direction, over time and space from a general circulation model to calculate the oil spill trajectories. Through sampling without replacement, the spill trajectory analysis considers many different currents throughout the study area.

Impacts to NWAB. The VLOS trajectory model does provide information regarding how a VLOS model could impact coastal villages in the Northwest Arctic Borough (NWAB). Appendix B, Figure B-1 shows that the NWAB is within the study area used in the oil-spill trajectory analysis. Figure B-7

shows the individual land segments (47-61) used in the oil spill trajectory analysis within the NWAB. Table A.1-15 of the Sale 193 FEIS, which is incorporated by reference, lists the environmental resource areas used in the analysis of oil spill effects on subsistence resources of which ERA 5 and 13 are adjacent to the NWAB. All percent trajectories contacting less than 0.5% (one half of a percent) are not shown in the Appendix B, Tables B-7 through B-22. The document provides information on the NWAB and shows the percent trajectories contacting the NWAB is less than 0.5% for all launch areas 1 through 13. Additional discussion of the importance of subsistence and potential impacts to NWAB subsistence harvest patterns is provided within Issue Category 23.

Wind. The objective of the Final SEIS section referenced by the commenter is to describe severe and extreme weather conditions that could impact the disposition of sea-surface oil and oil-spill recovery efforts. Winds over the sea reaching 25 to 30 miles per hour during a storm are classified on the Beaufort Wind Force Scale as strong winds. These wind conditions cause rough seas and large waves of 8 to 13 feet and often occur during a severe storm. Severe storms are not necessarily defined only by the wind speed, but also consider precipitation and temperature, and can occur in winter and summer. However, it is wind speed that would be the storm feature relevant to the disposition of sea-surface oil in the event of an oil spill. The commenter is correct that much higher wind speeds have been recorded at Barrow; however the strongest storms do not occur with the same frequency. Such storms are described later in the same section of the Final SEIS that have wind speeds at or near gale force (31 to 45 miles per hour) with huge waves of 15 to 20 feet.

Effect of Cold. Appendix B, Section 2.2 discusses evaporation of oil under Arctic condition in which colder temperatures in open water slow, but do not stop, evaporation. Evaporation does not occur once oil is incorporated into sea ice. The results of the oil spill trajectory model are used to analyze how resources are differentially effected by a very large oil spill from different portions of the sale area and are discussed Oil Spill Trajectory Analysis in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15.

Oil Type. BOEMRE discussed in Section IV.D.2. Very Large Oil Spill (VLOS) Scenario that the oil discharged from the hypothetical well is estimated to be 35° API crude oil like that recovered at the Klondike 1 well. This type of crude oil is believed to represent the dominant (Triassic-sourced) petroleum system in the central Chukchi Sea. Appendix D, Section 8 contains a further discussion on oil type.

Melt-out Spill. For clarity, BOEMRE has changed the specific dates in the notes for Appendix B, Tables B-3 and B-4 to reflect spills into open water and spills melting out from sea ice.

Oil Spill Trajectory Model Results and Presentation. The differences in the oil spill trajectory model results by launch area provide information regarding impacts to environmental, social and economic resources from different portions of the Lease Sale 193 area. The Sale 193 Final SEIS includes summaries of environmental impacts at the end of each resource discussion within Section IV.E, within Section II.D., and within the Executive Summary.

Regarding requests for maps, the Sale 193 FEIS, Appendix A and the Final SEIS, Appendix B, Figures B-1 through B-10 show the study area, launch areas, environmental resource areas, land segments, grouped land segments and boundary segments. The Sale 193 FEIS, Appendix A, Tables A.1.12-16 provide detailed information on environmental resource areas and land segments.

The BOEMRE completed a careful and thorough trajectory analysis for a very large oil spill from 13 individual launch areas within the lease sale area for three different seasons. The trajectory analysis considered 84 environmental, economic and social resource areas, 126 individual land segments, 15 grouped land segments and 39 boundary segments to analyze the spatial components of the study area which are shown in Appendix B, Figures B-1 through B-10. Appendix B, Tables B-5 and B-6 show the discontinuous area contacted in square kilometers by a very large oil spill from each of the 13

launch areas The results of the oil spill trajectory model are used to analyze how resources are differentially effected by a very large oil spill from different portions of the sale area and are discussed within the Oil Spill Trajectory Analysis subsection in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15. Additional maps and/or animations are not deemed necessary in this document.

Oil Spill Trajectory Model. The VLOS trajectory analysis is not a single trajectory but rather thousands of trajectories launched from over 1,000 launch points and summarized for 13 launch areas, for three seasons, which collectively represent how a VLOS could spread over time from those areas. Appendix B, Tables B-5 and B-6, estimate the discontinuous area contacted over six time periods from the 13 launch areas. A collection of trajectories representing a VLOS can contact multiple locations. Although a trajectory stops after contacting a land segment, the length of the land segments (average 20 km) provide a conservative estimate of oil contacting shore, particularly with the low tidal elevation (10 cm) along the Chukchi Sea. The agency has reviewed the state of the art on modeling interactions between spilled oil and shorelines for the development of algorithms for oil spill risk analysis modeling (USDOI, MMS 2007).

Differences Associated with Spill Location. Tables B-5 and B-6 are not the slick's total area estimated by adding up all the area through which linear trajectories pass. Appendix B, Section 4.4 states, "The cumulative area is discontinuous because it does not represent the entire area covered by the VLOS at any one time; rather it is a cumulative estimate of the area contacted by a VLOS over six time periods." In other words, the discontinuous area can be considered as the area of influence of the very large oil spill within six time intervals. Appendix B, Tables B-5 and B-6 show that with the exception of LA09 most of the launch areas have a similar size discontinuous area contacted. A very large oil spill is estimated to cover a very large discontinuous area no matter where the origin of the very large oil spill began. The results of the oil spill trajectory model are used to analyze how resources are differentially affected by a very large oil spill from different portions of the sale area and are discussed within the Oil Spill Trajectory Analysis subsection in sections IV.E 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 15.

Issue 35. Spill Response and Cleanup

Summary of Comments

Many commenters took issue with the manner in which the SEIS addresses spill response and cleanup. These commenters fell within two general groups. The first asserted that the SEIS did not adequately analyze and acknowledge the inherent challenges of spill response and cleanup in the Arctic, particularly weather, ice, cold, darkness, lack of infrastructure, lack of experience, lack of proven technology, etc. Often, these comments requested a clear statement in the SEIS that there is no proven way to adequately clean up a spill in the Arctic. There was also a request for detailed information, including:

- An estimate of the downtime required to establish staging areas.
- An indication as to where the staging areas would be located, and whether supplies are already in place there.
- An estimate of the weather downtime for vessels travelling from Cook Inlet and Prince William Sound to the spill.
- An explanation of how a responder will get to the North Slope and where they will stay, accounting for logistics and responder downtime.
- An indication in the document that the number of vessels and responders would decrease exponentially as the spill continues and weather and ice become unfavorable.

- More information regarding potential locations for boom deployments, where response efforts should be prioritized, and the efficacy of dispersants and their impacts to the environment.
- Additional studies on dispersants and whether they would cause more harm than good if used in the Arctic.

Two related comment noted widespread concern about the lack of necessary infrastructure and the inability of agencies to provide critical data such as weather and ice forecasting—this does not inspire confidence among local people that exploration and development of the Lease 193 area can currently occur in a manner protective of the environment. One of these comments challenged the assumptions in the “Levels of Recovery and Cleanup Activities” as unrealistic, given the lack of infrastructure and harsh environment of the Arctic. This included assumptions regarding an “exponential” increase in the number of vessels and responders, the “five to ten staging areas,” the “15 to 20 skimming vessels,” the “thousands of responders,” etc. The comment suggested there is no way to mobilize this equipment, house and feed the people, etc.

The second general group of comments regarding spill response and cleanup criticized the SEIS for downplaying the role that spill response and cleanup can play in mitigating the adverse effects of a VLOS. It was asserted that, after all, intervention and response plans are required for OCS well approval, and operators may have an ability to immediately respond to an emergency. Also, this group of commenters found it confusing that the VLOS scenario does not adjust the overall spill volume or trajectory analysis to account for successful spill response and cleanup, and yet analyzed potential negative impacts that spill response and cleanup could have on environmental resources.

One comment (from EPA) specifically asked that BOEMRE update and emphasize the existing discussion of the responsibilities and activities of the Alaska Regional Response Team (RRT), including the development and implementation of the Arctic Sub-Area Plan.

A couple of comments expressed concerns about Appendix B:

- Specify “ice downtime” for stable ice to form before cleanup could commence.
- Paragraph 3 of Appendix B contains no mention of potential remodeling of under-ice surfaces in which oil could be released.

Source of Comments

- Tribal Governments and Alaska Native Organizations
- State Government
- Local Government
- Environmental Organizations
- Corporations and Industry Groups
- General Public

Response to Comments

Spill Response and Cleanup – Challenges. BOEMRE shares concerns regarding the many unique challenges operating in the Arctic and the potentially devastating effects of a catastrophic oil spill. While multiple methods for recovering and cleaning up spilled oil exist, severe weather and/or the presence of ice could interfere with or temporarily preclude each of these methods. This point is made clear in the SEIS, which references the 31 Arctic oil spill response research projects that BOEMRE has funded.

The VLOS scenario describes spill response activities in order to inform the environmental effects analysis in Section IV.E. BOEMRE provides reasonable estimates of quantities, timeframes,

locations, etc. to provide the public and the decision maker with a basic picture of what a response would look like, as well as to facilitate analysis potential impacts from spill response activities. The existing level of detail in the SEIS is sufficient to accomplish these goals. More precise estimates of weather downtimes, staging area locations, boom deployment locations, etc. are unnecessary in this document and could result in undue speculation and/or a loss of focus on the environmental effects analysis. Again, the purpose of including a VLOS scenario in this document is to analyze the potential environmental effects of a hypothetical VLOS. The purpose is not to plan response scenarios. Oil Spill Response Plans would be evaluated on a plan-be-plan basis at the Exploration Plan phase.

That said, BOEMRE will attempt to offer some additional factual information on spill response protocols. Boom deployment and response effort prioritization will be dependent on where oil will come to shore. Priority Protection Sites (PPS) have been identified in the Alaska Clean Seas Technical Manual which has been incorporated by reference into the North Slope Subarea Contingency Plan. Prioritization would be based on the time of the year the spill occurred and the resources that could be impacted by oil entering the area.

Dispersants are not currently authorized for use in the Chukchi Sea by applicable contingency plans.

Industry is required to have provisions to mount a spill response inclusive of the logistical support necessary to maintain a large scale continuing response. In addition to industry capabilities, both State and Federal response assets can be pulled into service as outlined in the Unified Plan and the North Slope and Northwest Arctic Subarea Contingency plans.

Spill Response and Cleanup – Mitigation. The Final SEIS makes clear that: regulatory standards exist to help prevent a spill; intervention and response plans are required for OCS well approval; well intervention techniques cure loss-of-well control events the vast majority of time without any oil being spilled; operators may have an ability to immediately respond to an oil spill; and spill response and cleanup can mitigate the adverse effects of a VLOS.

In addition to a detailed qualitative assessment of potential intervention and response techniques, Section IV.D.3 of the Final SEIS also mentions specific measures contained within recent applications for activities in the Alaska OCS.

As pointed out in several comments, the volume of the hypothetical VLOS is not adjusted to account for successful response and cleanup. This approach acknowledges the potential difficulties of responding to a spill under various conditions (i.e. cold, darkness, ice, wind) and furthers the goal of analyzing a low-probability, high impact event. And it does so without shifting the focus of this environmental effects document into a debate about the efficacy of spill response techniques. The SEIS mentions multiple times that the volume and trajectories of the VLOS scenario are not adjusted to assume successful spill response and cleanup; these explanations provide sufficient clarity on the issue.

Successful spill response and cleanup efforts would indeed help reduce the amount of spilled oil contacting or otherwise affecting valued resources. Yet it is also true that in the event of a spill, response and cleanup efforts can incidentally cause certain adverse impacts to environmental resources. These impacts are a foreseeable consequence of spill response and cleanup activities and are analyzed accordingly.

Issue 36. Consideration of USGS Report

Summary of Comments

Many commenters referenced a report released by USGS in June 2011 (subsequent to release of the Revised Draft SEIS but prior to the release of the Final SEIS). As described in new language

incorporated into Section I.G of this Final SEIS, the USGS report summarizes key existing scientific information, develops a rapid process to identify where knowledge gaps exist, and provides initial guidance for what research is needed to improve decision making.

This report was most often characterized by commenters as confirming the notion that critical questions remain unanswered because of a lack of scientific data, particularly about which areas of the Chukchi Sea are important to species that inhabit the region and when they use those areas.

Many commenters also asserted that the report's conclusions and recommendations require the following actions:

- Suspension of leases until BOEMRE evaluates the findings of recent USGS report and produces a strategy for gathering additional information on whether, where, when and how to authorize oil and gas activities.
- Consideration, at the lease sale stage, of additional spatial information for species using Chukchi Sea
- Reconsideration of the requirements of 40 CFR 1502.22 and BOEMRE's approach to analyzing missing information, taking any additional time to complete the SEIS if necessary.
- Reevaluation of the conclusions drawn by BOEMRE during the entire Lease Sale 193 process on whether certain information is relevant to potentially significant effects and whether the information is essential to making a reasoned choice.
- Procurement of additional information to determine potential hazards to subsistence livelihoods from oil and gas
- Consideration of local traditional knowledge is critical to research into the Arctic and oil and gas activities there.

Several additional commenters suggested the following:

- The SEIS does not reflect the USGS report conclusion that "the effects of climate change are anticipated to influence all components of the Arctic ecosystem, and the Arctic OCS energy activities may exacerbate those changes, unless careful analysis of risks and tradeoffs is conducted."
- The SEIS does not analyze how sea ice conditions have changed throughout different areas of the lease sale area (including the Chukchi Polynya and Hanna Shoal), and how such changes could affect both biological impacts and risks to exploratory and production platforms.
- BOEMRE should partner with local, state, and federal entities to develop a research and monitoring plan that defines existing information and research needs through a data gap analysis; catalogs species, populations, and habitat; tracks physical factor affecting productivity, habitat, and migrations; increases knowledge of ecosystem interactions and trophic linkages and effects from human activities; and integrates data to identify sensitive habitat and processes

Source of Comments

- Tribal Governments and Alaska Native Organizations
- Local Governments
- Environmental Organizations
- General Public

Response to Comments

Gathering Information and Use of Traditional Knowledge. BOEMRE's comprehensive, ongoing efforts to gather additional information about the ecosystem and people of the Chukchi Sea region is described in greater detail in other portions of this Appendix, particularly within Issue Categories 2 and 7. BOEMRE values traditional knowledge very highly and actively incorporates it into current and proposed studies, environmental analysis, and decision-making.

Data Gaps and the SEIS. Consideration of incomplete information and data gaps in the EIS context is governed by CEQ regulations at 40 CFR 1502.22. A detailed explanation of these requirements is provided in the introduction to Appendix A of this Final SEIS. While the USGS report provides valuable insight pertaining to the current state of scientific knowledge in the Arctic, it does not alter the procedural requirements of any CEQ regulations, including 40 CFR 1502.22. Thus, BOEMRE's methodology in addressing incomplete information is not changed.

As is explained in Appendix A and depicted visually on page A2, the first step in a 40 CFR 1502.22 analysis entails consideration of whether a particular "data gap" must be addressed in an EIS. If the incomplete information is not "relevant to reasonably foreseeable significant adverse effects" from the proposed action, then the EIS need not address this information. Where information is indeed relevant to such impacts, the EIS must address that information. BOEMRE believes that the Sale 193 FEIS and Final SEIS for Lease Sale 193 discuss any and all incomplete or missing information meeting the threshold of "relevant to reasonably foreseeable significant adverse effects". Recall that the Sale 193 FEIS contained hundreds of references to various forms of incomplete information—these statements are catalogued and further analyzed within Appendix A. Chapters III through V of the Final SEIS also discuss incomplete information wherever appropriate.

Evaluation of USGS Report. BOEMRE has examined the USGS report and finds it to contain valuable summary and synthesis regarding information strengths and weaknesses in the Arctic. BOEMRE will continue to consider the report's recommendations, which will help guide ongoing and future efforts to collect additional information. The USGS report does not, however, alter BOEMRE's assessment of whether current information is adequate to support a decision on Lease Sale 193. The Sale 193 FEIS and the Final SEIS contain sufficient information to support a reasoned choice among lease sale alternatives. This is explained in greater detail within Issue Categories 8 and 27.

Because BOEMRE finds the USGS report neither requires discussion of additional items of incomplete or missing information in the Final SEIS, nor alters the requirement of 40 CFR 1502.22, no changes to Appendix A or the Final SEIS's general approach to incomplete or missing information have been made as a result of the USGS report.

Ongoing or Planned Studies. Table E-2 below catalogues various ongoing or planned studies that have been initiated, managed and/or funded by the BOEMRE Environmental Studies Program and/or the BOEMRE Technology Assessment and Research (TAR) Program. Results of the studies have been extracted and summarized for the Chukchi Sea only (No Beaufort Sea specific studies were included). Information in Table E-2 includes (1) the USGS Recommendation Number (from the report), (2) the key concept addressed by the the given recommendation number, (3) relevant ongoing and planned studies at BOEMRE, (4) recent relevant BOEMRE study reports, and finally (5) BOEMRE comments on the given recommendation. This table also demonstrates how these studies relate to the recommendations and identified data gaps of the USGS report.

Table E-2. Summary of BOEMRE review of recommendations (by Rec #) from the USGS Report, Circular 1370

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
2.01.A	Updates of Hydrocarbon Resource Estimates			<ul style="list-style-type: none"> • BOEMRE Alaska OCS Region, Resource Evaluation (RE) summary complete: www.boemre.gov/revdiv/2011Assessment.htm
2.01.B	Lack of Deepwater Arctic Data			<ul style="list-style-type: none"> • The deepwater in the Chukchi Sea Planning Area is outside of the Lease Sale 193 area.
2.01.C	Lack of publicly available recent 2D & 3D seismic data			<ul style="list-style-type: none"> • Public release of seismic data is controlled by Federal laws and regulations. BOEMRE has access to all data.
2.02	Characterize Gas Hydrates			<ul style="list-style-type: none"> • See Technical Report: www.boemre.gov/revdiv/GasHydrateFiles/HYDRATE.pdf • RE regional addendum to the 2011 National Assessment of Oil and Gas Resources is forthcoming in 2012 • Current BOEMRE assessment of the Chukchi Sea is that gas hydrates are unlikely to exist on the OCS portion of continental shelf.
2.03	Enhanced International Cooperation			<ul style="list-style-type: none"> • Arctic Council; SINTEF; Canada DFO. eg. see www.amap.no/oga
3.01	Large-scale Circulation	<ul style="list-style-type: none"> • Adaptation of Arctic Circulation Model (NT-08-02) • Surface Current Circulation High Frequency (HF) Radar Mapping in the Chukchi Sea (AK-09-06) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) • Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Hanna Shoal Ecosystem Study (AK-11-03) 	<ul style="list-style-type: none"> • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area • Also see BOEMRE funded NOPP study: Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice-diminished Arctic 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
3.02	Changing Ice Regime	<ul style="list-style-type: none"> • Adaptation of Arctic Circulation Model (NT-08-02) • Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) • Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04) • Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Hanna Shoal Ecosystem Study (AK-11-03) 	<ul style="list-style-type: none"> • OCS Study MMS 2008-021 Sea Ice-Ocean-Oilspill Modeling System (SIOMS) for the Nearshore Beaufort and Chukchi Seas: Parameterization and Improvement • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
3.04	Monitoring of Benthos	<ul style="list-style-type: none"> • Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03) • Hanna Shoal Ecosystem Study (AK-11-03) • Population Assessment of Snow Crab, <i>Chionoecetes opilio</i>, in the Chukchi and Beaufort Seas Including Oil and Gas Lease Areas (AK-08-12-09) 	<ul style="list-style-type: none"> • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
3.05.A	Wintering Distribution and Habitats	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • Migration and Habitat Use by Threatened Spectacled Eiders in the Eastern Chukchi Near and Offshore Environment (AK-09-03) • Population and Sources of Recruitment in Polar Bears (AK-05-02) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) • Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) 	<ul style="list-style-type: none"> • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
3.05.B	Key Forage Species	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • Trophic Links: Forage Fish, Their Prey, and Ice Seals in the Northeast Chukchi Sea (AK-08-12-05) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Hanna Shoal Ecosystem Study (AK-11-03) 	<ul style="list-style-type: none"> • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
3.05.C	Telemetry Studies	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Demography and Behavior of Polar Bears Summering on Shore in Alaska (AK-09-05) • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) • Pinniped Movements and Foraging: Bearded Seals (AK-07-08) • Monitoring Marine Birds of Concern in the Eastern Chukchi Nearshore Area (Loons) (AK-07-04a) • Migration and Habitat Use by Threatened Spectacled Eiders in the Eastern Chukchi Near and Offshore Environment (AK-09-03) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales 	None
3.06.A	Change in Coastal Geomorphology	<ul style="list-style-type: none"> • ShoreZone Mapping of the North Slope of Alaska (AK-11-07) 	<ul style="list-style-type: none"> • Also see BOEMRE funded NOPP study: Toward a Predictive Model of Arctic Coastal Retreat in a Warming Climate 	None
3.06.B	Consequences of Hazing		<ul style="list-style-type: none"> • OCS Study MMS 2007-055 Literature Review, Synthesis, and Design of Monitoring of Ambient Artificial Light Intensity on the OCS Regarding Potential Effects on Resident Marine Fauna 	BOEMRE Alaska OCS Region, Field Operations (FO)/Technology Assessment and Research (TAR) Renewable Energy Program (Atlantic)
3.06.C	Integrate Local Traditional Knowledge	<ul style="list-style-type: none"> • Pinniped Movements and Foraging: Bearded Seals (AK-07-08) • Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting AK-08-04) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> • OCS Study MMS 2009-063 Traditional Knowledge Regarding Bowhead Whales in the Chukchi Sea near Wainwright, Alaska • OCS Study MMS 2009-007 Common Ravens (<i>Corvus corax</i>) Nesting on Alaska's North Slope Oil Fields 	None
3.07.A	Life History Stages of Marine Fish	<ul style="list-style-type: none"> • Current and Historic Distribution and Ecology of Demersal Fishes in the Chukchi Sea Planning Area (93-48-67) 		None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
3.07.B	Identify Biological Hotspots	<ul style="list-style-type: none"> • Hanna Shoal Ecosystem Study (AK-11-03) • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04) • COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
3.08	Subsistence Harvests	<ul style="list-style-type: none"> • Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04) 	<ul style="list-style-type: none"> • OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska 	None
4.01.A	Development of Fully integrated regional climate models	<ul style="list-style-type: none"> • Adaptation of Arctic Circulation Model (NT-08-02) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) • Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) 	<ul style="list-style-type: none"> • OCS Study MMS 2009-062 Technical Manual for a Coupled Sea-Ice/Ocean Circulation Model • OCS Study MMS 2008-021 Sea Ice-Ocean-Oilspill Modeling System (SIOMS) for the Nearshore Beaufort and Chukchi Seas: Parameterization and Improvement • OCS Study MMS 2006-043 Proceedings of a Workshop on Hydrological Modeling of Freshwater Discharge from Alaska's Arctic Coast 	None
4.01.B	Reduce Uncertainty of Storminess Projections	<ul style="list-style-type: none"> • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) • Mapping and Characterization of Recurring Polynyas and Landfast Ice in the Chukchi and Beaufort Seas (AK-09-04) 	<ul style="list-style-type: none"> • OCS Study MMS 2005-068 Mapping and Characterization of Recurring Spring Leads and Landfast Ice in the Beaufort and Chukchi Seas • Also see BOEMRE funded NOPP study: Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice-diminished Arctic 	NOAA, US Army Corp of Engineers (USACE), and State of Alaska with lead responsibility
4.01.C	Projecting Circulation Patterns	<ul style="list-style-type: none"> • Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) • Adaptation of Arctic Circulation Model (NT-08-02) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) 	<ul style="list-style-type: none"> • Also see BOEMRE funded NOPP study: Comprehensive Modeling Approach Towards Understanding and Prediction of the Alaskan Coastal System Response to Changes in an Ice-diminished Arctic 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
4.01.D	Response of Species to Changes	<ul style="list-style-type: none"> Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03) Current and Historic Distribution and Ecology of Demersal Fishes in the Chukchi Sea Planning Area (AK-93-48-67) Population Connectivity and Larval Dispersal in Bering, Chukchi and Beaufort Sea Snow Crab Populations: Estimating Spatial Scales of Disturbance Impacts AK-08-12-06) Hanna Shoal Ecosystem Study (AK-11-03) Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
4.01.E	Track Trajectory Climate Change	<ul style="list-style-type: none"> Adaptation of Arctic Circulation Model (NT-08-02) COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) Biogeochemical Assessment of the OCS Arctic Waters (AK-08-12-03) Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) 	<ul style="list-style-type: none"> OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None
5.01	Coordinated Organization of Spill Preparedness Data	<ul style="list-style-type: none"> Physical and Chemical Analysis of Crude and Refined Oils: Lab and Mesoscale Oil Weathering (Proposed) 	<ul style="list-style-type: none"> OCS Study MMS 2008-033 Empirical Weathering Properties of Oil in Ice and Snow 	TAR, USCG responsibility <ul style="list-style-type: none"> There is a major Joint Industry Project on this topic. Annual Arctic Marine Oilspill Program Technical Seminars (AMOP)
5.02	Develop Transparent Full-cycle Risk Model			None
5.03	Updated Spill Data, Reexamination of Statistical Approaches	<ul style="list-style-type: none"> Updates to the Fault Tree for Oil-Spill Occurrence Estimators (AK-11-01) Oil Spill Occurrence Estimators for Onshore Alaska and Canada North Slope Crude and Refined Oil Spills (AK-11-02) Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) 	<ul style="list-style-type: none"> OCS Study BOEMRE 2011-030 Alternative Oil Spill Occurrence Estimators for the Beaufort and Chukchi Seas Fault Tree Method OCS Study MMS 2008-036 Alternative Oil Spill Occurrence Estimators and Their Variability for the Chukchi Sea - Fault Tree Method 	None
5.04	Understand Oil-in-Ice Weathering	<ul style="list-style-type: none"> Physical and Chemical Analysis of Crude and Refined Oils: Lab and Mesoscale Oil Weathering (Proposed) 	<ul style="list-style-type: none"> OCS Study MMS 2008-033 Empirical Weathering Properties of Oil in Ice and Snow 	TAR Research <ul style="list-style-type: none"> There is a major Joint Industry Project on this topic.
5.05	Characterize Indigenous Microbial Populations in Water Column		<ul style="list-style-type: none"> OCS Study MMS 2004-061 Petroleum Hydrocarbon-Degrading Microbial Communities in Beaufort-Chukchi Sea Sediments 	<ul style="list-style-type: none"> From 1975 through 2011, agency supported science has produced more than 60 papers, reports, or theses on aspects of microbial ecology and microbial oil degradation in primarily Arctic waters and sediments.
5.06	Improve physical oceanographic and meteorological data to help inform a wide variety of issues in the Arctic	<ul style="list-style-type: none"> Hanna Shoal Ecosystem Study (AK-11-03) Characterization of the Circulation on the Continental Shelf Areas of the Northeast Chukchi and Western Beaufort Seas (Proposed) 	<ul style="list-style-type: none"> OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
5.07	Application of Structured Decision Making Tools			<ul style="list-style-type: none"> Complex mixed analytical and expert Bayesian Network models are opaque and are not transparent to decision-makers.
5.08	Constraining estimates of oil reservoir volume and pressure patterns in the Arctic OCS			<ul style="list-style-type: none"> 2011 National Assessment used the latest geologic and geophysical data NTL 2010-06 mandates a BOEMRE Worst Case Discharge Estimate prior to drilling BOEMRE has access to all OCS geophysical & geologic data. Public release of data is controlled by statute and regulations.
5.09	Field Test assets and Data Systems for spill response	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>Topic included in annual call for Request for Proposals for the TAR Program</p>
5.10	Response Gap Analysis			<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>
5.11	Develop Mechanical Recovery Systems Oil Under Ice	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>Topic included in annual call for Request for Proposals for the TAR Program</p>
5.12	Forecasts Ice Coverage			NOAA is the responsible Federal agency

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
5.13	Define the Applicability of ISB	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>Topic included in annual call for Request for Proposals for the TAR Program</p>
5.14.A	Chemical Analysis of in-situ burning (ISB)	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>Topic included in annual call for Request for Proposals for the TAR Program</p>
5.14.B	Character ISB residues	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>Topic included in annual call for Request for Proposals for the TAR Program</p>
5.14.C	Improve Spill Plume Model			NOAA is the responsible Federal agency
5.15	Dispersants Effects Analysis	<ul style="list-style-type: none"> • Arctic Cod Pilot Genetics and Toxicity Study (AK-11-13a) • Arctic Cod Genetics and Toxicity Study (AK-11-13b) 		<p>Topic included in annual call for Request for Proposals for the TAR Program</p> <ul style="list-style-type: none"> • There is a major Joint Industry Project on this topic.
5.16	Predict Effectiveness of Dispersant	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	<p>EPA, USCG Responsibility Topic included in annual call for Request for Proposals for the TAR Program</p>
5.17	Understand Toxic and Sublethal Effects of Dispersants	<ul style="list-style-type: none"> • Arctic Cod Pilot Genetics and Toxicity Study (AK-11-13a) • Arctic Cod Genetics and Toxicity Study (AK-11-13b) 		<p>TAR Program</p> <ul style="list-style-type: none"> • There is a major Joint Industry Project on this topic.

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
5.18	Define Impact of Chemical Herd	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	None
5.19	Test Remote-sensing operations for spill response	<p>USCG / NOAA / Regional Response Team responsibility</p> <ul style="list-style-type: none"> • BOEMRE Technology Assessment and Research (TAR) Program funds studies to evaluate new and existing technology and funds research to aid in the development of new technology or to fill data gaps for existing methods of oil spill response. 	<p>TAR Program has funded oil spill response research for over 30 years. A listing of current Arctic related oil spill response projects is on the TAR web site at http://www.boemre.gov/tarprojectcategories/PDFs/MMSArcticResearch.pdf and http://www.boemre.gov/tarprojectcategories/ArcticOilSpillResponseResearch.htm</p>	Topic included in annual call for Request for Proposals for the TAR Program
5.20	Spill Protocols in Place			USCG / Regional Response Team responsibility A Memorandum of Agreement is in place between the United States and Russia to address trans-boundary oil spill response issues
5.21	Identify Protocols for Spill Response Plan			USCG / Regional Response Team responsibility A Memorandum of Agreement is in place between the United States and Russia to address trans-boundary oil spill response issues
5.22	Analyze NRDA metrics	<ul style="list-style-type: none"> • Updates to the Fault Tree for Oil-Spill Occurrence Estimators (AK-11-01) • Oil Spill Occurrence Estimators for Onshore Alaska and Canada North Slope Crude and Refined Oil Spills (AK-11-02) • Workshop—Interagency Protocols for Immediate On-the-Scene Oil Spill Impact Science (AK-11-11) • Maximum Credible Blowout Occurrence and Size Estimators for the Alaska OCS (AK-11-12) 		NOAA is the responsible Federal agency
5.23	Joint Study Planning	<ul style="list-style-type: none"> • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Alaska Marine Science Symposium (AK-10-03) • Conference Management and Reports on BOEMRE Results (AK-07-06) 	<ul style="list-style-type: none"> • OCS Study MMS 2007-002 Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
5.24	Build Distributed Biological Observatory	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Chemical and Benthos (AK-08-03) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Hanna Shoal Ecosystem Study (AK-11-03) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> • Also see annual reports/posters at http://www.afsc.noaa.gov/nmml/cetacean/research/caepresearch.php?url=nmmlcaep1105 	None
5.26	Develop Collaboration of an Overall Science Plan	<ul style="list-style-type: none"> • Alaska Marine Science Symposium (AK-10-03) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Coastal Marine Institute in Alaska - 2008-2012 (AK-08-12) • Conference Management and Reports on BOEMRE Results (AK-07-06) 		Ongoing collaboration with North Slope Science Initiative, LCC, USGS, USARC, UAF-CMI
6.01	Synthesize the Literature on Effects of Anthropogenic Sound on Marine Mammals	<ul style="list-style-type: none"> • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) 		None
6.02	Validate Models Sound Propagation			<ul style="list-style-type: none"> • Public release of data is controlled by Federal laws and regulations.
6.03	Inventory Vessel Noise			<ul style="list-style-type: none"> • No offshore oil-related MMPA permits for BOEMRE seismic permits prior to 2006 required measurement of ship noise • A database for ships used after this could be developed, but the locations of all ship activities are considered proprietary information and public release of data is controlled by Federal laws and regulations.
6.04	Develop Database of Icebreaker Generated noise			NOAA is the Federal agency with lead responsibility.
6.05	Quantifies Aircraft Noise			NOAA and FWS are the Federal Agencies with lead responsibility
6.06	Database of Ambient Ocean Noise	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) 		NOAA is the Federal agency with lead responsibility.

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
6.07.A	Distinguish Behavioral Effects of Sound	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 		NOAA is the Federal agency with lead responsibility
6.07.B	Make Inferences about Sound Thresholds for Populations	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 		NOAA is the Federal agency with lead responsibility.
6.08	Bowhead Whale Synthesis for Anthropogenic Noise	<ul style="list-style-type: none"> • COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea -Personnel Needs (AK-10-05) • Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea - Aircraft Needs (AK-11-06) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) 		NOAA is the Federal agency with lead responsibility • Public release of data is controlled by Federal laws and regulations.

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
6.09	Understand Habitat Needs for Bowhead	<ul style="list-style-type: none"> • COMIDA: Distribution & Relative Abundance of Marine Mammals: Aerial Surveys (AK-08-02) • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) • COMIDA: Factors Affecting the Distribution and Relative Abundance of Endangered Whales: Biophysical Moorings and Climate Modeling (AK-09-02b) • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea -Personnel Needs (AK-10-05) • Distribution and Relative Abundance of Marine Mammals in the Chukchi Sea and the Fall Migration of Bowhead Whales in the Beaufort Sea - Aircraft Needs (AK-11-06) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) 	<ul style="list-style-type: none"> • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales • Also see annual reports/posters at www.afsc.noaa.gov/nmml/cetacean/research/caepresearch.php?url=nmmlcaep1105 	None
6.10	Ensure Effective Mitigation to Subsistence Hunting	<ul style="list-style-type: none"> • Study of Sharing Networks to Assess the Vulnerabilities of Local Communities to Oil and Gas Development Impacts in Arctic Alaska (AK-05-04a) • COMIDA: Impact Monitoring for Offshore Subsistence Hunting (AK-08-04) 	<ul style="list-style-type: none"> • OCS Study BOEMRE 2010-033 Satellite Tracking of Western Arctic Bowhead Whales • OCS Study MMS 2009-038 Annual Assessment of Subsistence Bowhead Whaling Near Cross Island, 2001-2007 • OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska • OCS Study MMS 2007-062 Quantitative Description of Potential Impacts of OCS Activities on Bowhead Whale Hunting Activities in the Beaufort Sea 	None
6.11	Understand Sensitivity of Beluga Whales to Icebreaking	<ul style="list-style-type: none"> • COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) 		<ul style="list-style-type: none"> • Also see projects by North Slope Borough and Coastal Impact Assistance Program
6.12	Inventory Habitat Needs of Beluga Whale	<ul style="list-style-type: none"> • Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) • Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) 	<ul style="list-style-type: none"> • OCS Study MMS 2005-035 Distribution and Movements of Beluga Whales from the Eastern Chukchi Sea Stock During Summer and Early Autumn 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
6.13	Understand Habitat Needs of Gray Whale	<ul style="list-style-type: none"> Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) Satellite Tracking of Bowhead Whales: Habitat Use, Passive Acoustic and Environmental Monitoring (Proposed) Use of the Chukchi Sea by Endangered Baleen and Other Whales (Westward Extension of BOWFEST) (Proposed) 		None
6.14	Reassess Polar Bear Distribution and Habitats	<ul style="list-style-type: none"> Demography and Behavior of Polar Bears Summering on Shore in Alaska (AK-09-05) Population and Sources of Recruitment in Polar Bears (AK-05-02) 		None
6.15	Quantify Habitat Requirements of Ice Seals	<ul style="list-style-type: none"> Pinniped Movements and Foraging: Bearded Seals (AK-07-08) Trophic Links: Forage Fish, Their Prey, and Ice Seals in the Northeast Chukchi Sea (AK-08-12-05) Ice Seal Movements and Foraging: Village Based Satellite Tracking and Acoustic Monitoring of Ringed, Bearded, and Spotted Seals (Proposed) 		None
6.16	Study Vocalizations of Ice Seals	<ul style="list-style-type: none"> Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) 		None
6.18	Walrus Reactions to Sound	<ul style="list-style-type: none"> Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) COMIDA: Passive Acoustic Detection and Monitoring of Endangered Whales in the Arctic (AK-09-02a) 		None
6.19	Inventory Habitat Needs of Pacific Walrus	<ul style="list-style-type: none"> Pinniped Movements and Foraging: Walrus Habitat Use in the Potential Drilling Area (AK-09-01) 		None
7.01	Improved Access to Information	<ul style="list-style-type: none"> Marine Mammal/Physical Oceanography Synthesis (AK-11-05) Conference Management and Reports on BOEMRE Results (AK-07-06) Coastal Marine Institute in Alaska - 2008-2012 (AK-08-12) Alaska Marine Science Symposium (AK-10-03) Alaska Environmental Studies Project Browser (AK-11-15) 	<ul style="list-style-type: none"> OCS Study MMS 2009-030 Researching Technical Dialogue with Alaskan Coastal Communities: Analysis of the Social, Cultural, Linguistic, and Institutional Parameters of Public/Agency Communication Patterns OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska OCS Study MMS 2009-005 Eleventh Information Transfer Meeting - Final Proceedings October 28, 29, 30, 2008 	None
7.02	Develop a Cost/Benefit Analysis of Petroleum Activities	<ul style="list-style-type: none"> Testing, Improvement, and New Alaska Data for MAG-PLAN (AK-08-10) 	<ul style="list-style-type: none"> OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska OCS Study MMS 2006-020 North Slope Economy, 1965 - 2005 	None

Rec. #	Key Concepts	Chukchi Sea: BOEMRE Ongoing/Planned Studies*	Chukchi Sea: Recent OCS Study Reports	Comments
7.03	Develop a Body of Knowledge about Cumulative Impacts	<ul style="list-style-type: none"> • Bowhead Whale Feeding Variability in the Western Alaskan Beaufort Sea: Satellite Tracking of Bowhead Whales (AK-06-01, AK-10-01) • Bowhead Whale Feeding Variability in the Western Beaufort Sea: Feeding Observations and Oceanographic Measurements and Analyses (AK-06-01, AK-10-02) • Marine Mammal/Physical Oceanography Synthesis (AK-11-05) • Alaska Environmental Studies Project Browser (AK-11-15) 	<ul style="list-style-type: none"> • OCS Study MMS 2009-006 Synthesis: Three Decades of Research on Socioeconomic Effects Related to Offshore Petroleum Development in Coastal Alaska 	None
7.04	Incorporate Climate Change Effects Into Cumulative Analysis	<ul style="list-style-type: none"> • Evaluation of the Use of Hindcast Model Data for OSRA in a Period of Rapidly Changing Conditions (Workshop) (AK-10-07) • Adaptation of Arctic Circulation Model (NT-08-02) • Beaufort/Chukchi Seas Mesoscale Meteorology Modeling Study (AK-06-05) 		None

**Revised Draft SEIS
Public Hearing Transcripts**

**Kotzebue
Point Hope
Fairbanks
Barrow
Point Lay
Anchorage
Wainwright**

PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Kotzebue, Alaska
Taken June 21, 2011
Commencing at 7:05 p.m.

Volume I - Pages 1 - 81, inclusive

Taken at
Northwest Arctic Borough Offices
Kotzebue, Alaska

Reported by:
Mary A. Vavrik, RMR

A-P-P-E-A-R-A-N-C-E-S

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BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: Good evening. We are
going to be kind of informal tonight. Welcome to the
Revised Draft Supplemental EIS for Lease Sale 193. That
is a mouthful. And we are going to go into exactly what
that is and how we are handling it a little bit later on,
but we are going to do this a little bit differently.

So if you have been to our public hearings
before and even our scoping meetings, we're going to try
something new tonight to try to maximize the input.

Before we go any farther, I'd like to introduce
the team here. Sitting up at the head table we have got
Sharon Warren. Sharon is the project manager for this.
She knows the document inside out and backwards. We have
got Michael Routhier. Now Michael is the EIS coordinator
for the project, so he knows it just as well as Sharon.

We have Mary Vavrik here. Mary is the court
reporter. So every time we speak, we have to give our
names so she can get it in the record. And you can see
her hands. She's got her boxing gloves on, so let's not
disappoint Mary.

Mike Haller, raise your hand. Community liaison
for the Bureau of Ocean Energy Management, Regulation and
Enforcement. Scott Blackburn, Scott, okay, he is a
technical expert and technical writer for us. Steve

Scordino, he's from the Department of Interior Solicitor's
Office, helps keep us out of trouble. And John Callahan
for the Office of Public Affairs.

DR. JIM KENDALL: Before we do anything
else, Earl, it's time for a blessing, please.

MR. EARL KINGIK: First of all, I would
like to thank the people of Kotzebue for giving us a
chance to be in your chambers. Thank you very much.

We all know the Lord's Prayer. We are going to
ask for good health from our good Creator, the Dear Lord's
Prayer.

(The Lord's Prayer was recited by all present.)

DR. JIM KENDALL: Thank you, Earl. Okay.
A couple of ground rules here. We are going to have
probably the Elders speak first. And of course, that
wouldn't happen to be you, Walter, would it? So when the
time comes for that, Walter.

MR. WALTER SAMPSON: I'm right behind this
kid right here.

DR. JIM KENDALL: I'll give you the first
opportunity to make comment if you would like. Also
elected and appointed officials. I think that kind of
includes you, as well. When we actually get to the
comments stage of this, sometimes when we have 50 to 60
people, we have to limit it to two to three to four to

1 five minutes, but with the crowd we have here, I don't
2 think we have to be that restrictive. We can talk five,
3 six, seven minutes and we can always go back and revisit
4 the issues.

5 And we are going to do something different.
6 Once I have Sharon and Michael walk you through exactly
7 why we are here, okay, so we all understand and we start
8 from the same knowledge base, then if the crowd remains
9 the same, I think we are going to pull the chairs around
10 into a circle to try to encourage the dialogue. However,
11 I have promised Mary that if we pull the chairs into a
12 circle so we increase the dialogue, we have to give our
13 names before each of us speaks, or I will pay for it. So
14 I really appreciate that if we can try that little
15 technique, but try to keep Mary happy for the court
16 reporting.

17 Now, with that, before we get into the comment
18 period, et cetera, let's get to the meat of the matter.
19 And that is why are we here. Okay. Those of us here --
20 Mary is a contractor to do the court reporting. We are
21 from the Bureau of Ocean Energy Management, Regulation and
22 Enforcement. We used to be called Minerals Management
23 Service. We are responsible for the energy and mineral
24 resources of the Outer Continental Shelf.

25 You are here, so you have kind of a vague

1 understanding, some of you, and some of you a lot of
2 understanding, on what a lease sale is, the process. But
3 to make sure we are all on the same track, I've asked
4 Michael and Sharon to do something a little bit different.
5 Basically come up, go through some flip charts, starting
6 with square one on how this started, how we got to where
7 we are, and what we expect out of these discussions. And
8 then we are going to visit Point Hope, Point Lay, Barrow.
9 We are going to have a meeting in Fairbanks, as well as
10 Anchorage. Okay.

11 With that, I'd ask Sharon and Michael to come
12 up. And as we get through the night, it's going to be a
13 lot less formal.

14 MS. SHARON WARREN: Thank you for coming
15 here. And like Jim said, we are going to kind of go
16 through this because we have been here before. The lease
17 sales happened in 2008, and so we are going to walk you
18 through why we have got to that point.

19 First of all, we want your comments on the
20 Revised Draft Supplemental Environmental Impact Statement
21 for Chukchi Sea Lease Sale 193. We have a document on the
22 table. If you haven't received a copy, we have extra
23 ones. We have them on CD, as well as there are some hard
24 copies as well. I think there is one hard copy left, but
25 we do have CDs for that.

1 Lease Sale 193, was -- of course BOEMRE first
2 did a -- it was Minerals Management Service. We did an
3 environmental impact statement prior to having this sale.
4 The sale was held in February of 2008, three years -- over
5 three years ago. So that was when the sale was held. Six
6 companies bid on the rights to explore oil and gas, and we
7 offered 29.3 million acres, and only 2000 -- or
8 2,000,000 -- 2.8 million were leased through the lease
9 sale.

10 Then what happened days before the lease sale,
11 plaintiffs had sued to invalidate the lease sale.
12 However, there wasn't an injunction placed on the lease
13 sale. Sometimes the actions are to place an injunction to
14 stop the sale. That didn't happen. So the sale went
15 ahead and went forward. And that was the reason why we
16 had the bid. But it still stayed in the District Court in
17 Alaska in Anchorage.

18 And so in July of 2010 Judge Beistline made a
19 ruling saying that your EIS was -- most of it was
20 satisfactory, but you failed to address three concerns
21 that the Court had in that EIS. And so he sent the
22 document back to the agency to address those concerns.

23 And the three issues he wanted to address was
24 that we had failed to analyze the environmental impact of
25 natural gas development despite industry interest and

1 specific lease incentives for such development. We
2 offered the sale, and there was -- in that sale it said we
3 would give the companies incentives if they would also
4 produce the gas. However, we never addressed that in our
5 environmental impact statement. So the Court said you
6 need to go back and you need to address that point.

7 Another thing he said that we failed to do is
8 determine whether the missing information -- the EIS had a
9 lot of statements concerning there was uncertainty, we
10 don't know enough information about certain species and --
11 when the analysts did their analysis.

12 So he said you have to go back and you have to
13 meet the requirements of the Council of Environmental
14 Quality Regulations that said when you have uncertainty,
15 you have to do a number of steps to say whether or not
16 that missing information is relevant to the decision and
17 if it can be obtained and if there is a cost to do it. So
18 he wanted us to go back.

19 There was the court case. There was an exhibit
20 that was submitted. It was like a 45-page exhibit that
21 was submitted that went through everything that came out
22 of our document that said where all the uncertainty was.
23 And the judge said there is over 40-some pages that the
24 plaintiffs have brought up. That's pretty compelling that
25 you need to go back and take a look at those things.

1 So what we did in response to that court order,
2 we drafted a supplemental environmental impact statement
3 to address those three concerns. And some of you may have
4 seen the copy of it because we released it in October, in
5 the fall, and asked for public comments on it. And we
6 held public hearings and government-to-government
7 consultation on that document. We were here in Kotzebue,
8 as well as Point Hope, Point Lay, Wainwright, Barrow and
9 Anchorage. And so we did that document.

10 And then I'm going to let Mike explain what has
11 happened, why that document never got finalized and where
12 we're at today.

13 MR. MICHAEL ROUTHIER: So normally in the
14 NEPA process, you go from the draft EIS to the final EIS.
15 Here it was little bit different. We received over
16 150,000 comments on the draft EIS. Most of those asked us
17 to provide some analysis of a very large oil spill. This
18 is all happening in the wake of the Deepwater incident.
19 It was on everyone's mind. Everyone was thinking about
20 it. We received a lot of comments on it.

21 So internally we sat down as an agency and
22 decided that, hey, this is something that we should
23 probably do. The result was the draft SEIS became a
24 revised draft SEIS. In other words, we published a new
25 draft SEIS. And it's pretty similar to what we published

1 in October, except that it includes now analysis of a very
2 large oil spill scenario. And we are here tonight to
3 record public comments on the document.

4 Might make sense to concentrate on the very
5 large oil spill scenario, given that that's a new piece of
6 information, but we are open to talking about the rest of
7 the document, as well.

8 So as far as the term very large oil spill, what
9 does that mean? Well, in this process, in this NEPA
10 process -- and again, NEPA is something that allows us to
11 analyze environmental effects.

12 Very large oil spill is a hypothetical scenario
13 that we analyzed. We developed a scenario with input from
14 our geologists and our experts and figured out what's the
15 absolute biggest possible spill that could happen in the
16 Chukchi Sea planning area.

17 Once we got that estimate from our geologists,
18 we then turned over a scenario to our environmental
19 analysts or scientists, our wildlife biologists and so
20 forth. And they told us what types of environmental
21 effects could occur were a scenario of that nature to
22 happen.

23 One thing that we might like to make clear is
24 the difference between a very large oil spill scenario,
25 such as we have analyzed in this NEPA document, and a

1 worst-case discharge. That's another term that you might
2 hear associated with our processes, but there is a
3 difference between the two terms.

4 Again, very large oil spill, something we use as
5 a tool in our NEPA processes to understand potential
6 environmental effects. Worst-case discharge is a specific
7 term out of the -- our implementing regulations. It's a
8 calculation that entails a specific location, specific
9 type of well using specific technology. It's more of a
10 mechanical calculation required by our regulations. And
11 that's a more formal process that will then lead to the
12 oil spill planning aspects of what we do. And that would
13 come into play if the lease sale is reaffirmed and if it
14 gets to an exploration plan phase.

15 MS. SHARON WARREN: And again, this is --
16 this scenario is hypothetical. It's not based on an exact
17 well.

18 DR. JIM KENDALL: If I may interject,
19 Sharon, the worst-case discharges would most likely be
20 less in terms of volume than the very large oil spill
21 volume?

22 MS. SHARON WARREN: That's what is
23 expected.

24 DR. JIM KENDALL: So the very large oil
25 spill analysis is, from what our understanding is from the

1 geologists, the greatest spill that we foresee could
2 happen, and the worst-case discharges are from individual
3 wells with actual data that can be analyzed.

4 MS. SHARON WARREN: Yes. So what input do
5 we need? It's noted -- we prepared the Revised Draft
6 Supplemental EIS that not only addresses the court
7 concerns, but also addresses a very large oil spill. So
8 it's one complete document. So if you had seen the other
9 document before, there are a little bit of differences in
10 it because of those comments that we took. We also made
11 some changes based on some of those comments in the other
12 portions of the document, as well, and then added a very
13 large oil spill. So now we are seeking subsequent
14 comments on the draft document.

15 So if you believe you have information that is
16 important and you want us to consider it prior to us
17 preparing the final SEIS -- because that will be the next
18 stage; we will be preparing a final SEIS -- then please
19 provide that in your comments so that we can consider that
20 and, you know, take a look at what information you have
21 that you may have on it.

22 And in the fact -- also review the stuff that we
23 have looked at as far as oil spill modeling, currents and
24 everything else. There is maps in the back of the
25 document, you know. There is also information concerning

1 subsistence, where hunting is, the resources and
2 everything else. And having traditional knowledge
3 incorporated in that, in our document, to make sure that
4 we capture the right information when we are analyzing is
5 extremely helpful.

6 In addition to the public hearings, comments can
7 be submitted either by mail and they can also be
8 hand-delivered to our office, and/or they can go to our
9 website. And there is a website that we have that you can
10 go to and submit comments into regulations.gov. We have
11 some handouts over there that walks you through how to
12 submit comments using that -- from our website and how to
13 get to the regulations.gov. And you can go actually right
14 to the document and submit your comments on the website.

15 What happens next? Question nine is what
16 happens after these hearings. So we have the hearings.
17 What do we do with your information? We take the
18 information that we get, we consider those comments, and
19 we are going to finalize the -- the document. So we'll
20 have a final SEIS.

21 We are on a Court-mandated deadline. Okay.
22 Beistline, the District Court judge, issued an order on
23 the 19th of May and said agency and Secretary of the
24 Interior, you need -- the Secretary needs to make his
25 decision by October 3rd of this year. And the decision is

1 whether to reaffirm the sale, and what that would mean is
2 that the sale would maintain the -- based on how it was
3 offered and also the leases that were issued. Or he can
4 modify that, or he could cancel it. Those are the
5 decisions that he can make.

6 And so what he will do is the Secretary, once we
7 are done with the final SEIS, it will go out to the public
8 and let the public know that we have finalized the SEIS.
9 The Secretary cannot make a decision before 30 days is up.
10 So there is a 30-day waiting period before he can make
11 that decision. So the final SEIS would be out to the
12 public in early September so he can meet that October 3rd
13 deadline.

14 And then the document will be -- and in the
15 Secretary's decision will be filed with the Court. And
16 then the Court will take a look at it to see if we met our
17 obligations under the National Environmental Policy Act.
18 And then the Court will decide whether or not, depending
19 on how the decision was -- and I don't know how the
20 decision is going to be. I have no idea. And then it
21 will go forward from there as to what happens. But right
22 now we will just have to wait and see. But the document
23 is there.

24 That's another thing is we want to give the
25 decisionmaker all the information he needs to make his

1 decision, and so we need to give him the best information
2 so that he can make the best decision concerning this
3 lease sale. And that's where the public process comes in
4 and where all of you come in to help with that.

5 So is there any questions?

6 DR. JIM KENDALL: Before we get to the
7 public comment, I want to emphasize in particular what
8 Sharon just said in the last two or so minutes. The
9 document that we are preparing, the big, thick EIS, is not
10 a decision document. It's information that we put
11 together with your help and the help of other communities
12 and other federal and State agencies that we pass up to
13 the Secretary so that he can make a decision.

14 So what we need from everybody, including the
15 people in this room, is to help us make sure everything in
16 that document someone way above us can have before they
17 make their decision. So that's why we're here. We don't
18 make the decision, as Sharon said, go or no-go. We are
19 not there. That's not us. It's people way above us,
20 namely the Secretary. So we want to make sure that when
21 we give him this document, everything is in there that
22 could possibly be in there that he needs to consider.
23 Okay?

24 So we are going to start with the public comment
25 part. We have got a few extra people here. We do want to

1 maximum the input, so if you would like -- and let's think
2 about this for second. If we move stuff and put the
3 chairs in a circle so we can see each other and comment,
4 how does that sound?

5 UNIDENTIFIED SPEAKER: Good.

6 MR. JIM KENDALL: We've never done it
7 before, so let's give it a shot.

8 MR. WALTER SAMPSON: What's the time frame
9 from the time the second draft is -- gets in the process
10 before the decision is made to go or no-go?

11 MS. SHARON WARREN: The draft -- we are out
12 for public comment.

13 MR. WALTER SAMPSON: What I'm asking is
14 the time frame from the second draft EIS through the
15 process from when that decision is made to either go ahead
16 or no-go.

17 MS. SHARON WARREN: Okay. So the comment
18 period closes on July 11th. So we will have July 11th,
19 from that time frame on until the first part of September.
20 And during that process, we are going to be analyzing
21 those comments. We are going to be giving them to our
22 analysts. It will go through internal review by our
23 office, by the Solicitor's office. There is a lot of
24 people that review and respond, make sure that we are
25 responding to the comments, that we have addressed all the

1 substantive comments that we have got, and then it will be
2 finalized and be out in the public.

3 So from July 11th, the next time you will see it
4 will be a final SEIS around the first part of September.
5 Okay?

6 DR. JIM KENDALL: That was a good question
7 to ask because after all those steps, if we would have an
8 exploration plan that was deemed submitted, then we have a
9 whole bunch of other steps, review an exploration plan,
10 deem it submitted, we have more NEPA to do. Things don't
11 happen overnight, which is good. We have more time to do
12 it right. So that's what we would like. So before we
13 actually start more comments, get the chairs up.

14 Remember, I have a deal with Mary here that if
15 she can't hear you, I'm in trouble. And we have to state
16 our name before we make the comments. Get closer if you
17 can.

18 MR. WALTER SAMPSON: So you will be the
19 interpreter, I'm assuming.

20 DR. JIM KENDALL: Me?

21 MR. WALTER SAMPSON: Yeah.

22 DR. JIM KENDALL: In what way?

23 MR. WALTER SAMPSON: Because I'm going to
24 speak in my language.

25 DR. JIM KENDALL: I just moved to Alaska

1 from Washington, and I think I need to study Inupiaq.
2 Teach me one word tonight, Walter. Teach me a word
3 tonight.

4 MR. WALTER SAMPSON: You have got lots to
5 learn.

6 DR. JIM KENDALL: I know I have a lot to
7 learn.

8 UNIDENTIFIED SPEAKER: Tomok (Inupiaq ph).

9 DR. JIM KENDALL: Uh-oh. What did that
10 mean? I'm afraid to ask.

11 MR. WALTER SAMPSON: He said you are a
12 professional.

13 DR. JIM KENDALL: Professional what?
14 Okay. With that, I know some people here have indicated
15 they want to speak. Some indicated they don't want to
16 speak. Some have indicated nothing. But we always start
17 with the Elders and elected officials. And I think I can
18 think of one person who might qualify as an Elder.
19 Walter, could we start with you? Or would you like to
20 pass and come later?

21 MR. WALTER SAMPSON: No, I will start. I
22 don't have no objections to starting. But I -- first of
23 all, I want to thank you for coming to Kotzebue to provide
24 information to what is happening up north. That is a
25 critical issue that we all need to certainly be cognizant

1 about in today's world. Cost of energy is high. We have
2 some of the communities that are paying nine to \$15 a
3 gallon for fuel. That's a pricey price of fuel. But also
4 at the same time there is people who have some concerns in
5 regards to what is happening to this point. That's why
6 I'm glad you folks are here to provide additional
7 information as to what has transpired to this point when
8 people sued on the initial environmental impact statement.

9 But one thing I would hate to see is courts
10 making decisions for all of us. And I think that's a
11 bad -- bad part to have someone make the decision for you.

12 As a public official, I will not comment on
13 where the borough is until we get the final information
14 from -- through our legal counsel in regards to where our
15 position is as -- as assemblymen who have to consult with
16 our legal folks, with our staff and in regards to the
17 environmental impact statement second draft. Then we can
18 make a -- or we can give a position statement at that
19 point in time.

20 So we have got some meetings that are coming up,
21 and one of the issues that are -- will be on the table is
22 the resolution that the North Slope folks have with the
23 eight points. And we certainly are going to address that
24 resolution.

25 The original resolution that we submitted early

1 on, which basically objects to what was happening, is a
2 moot resolution. I call it a moot resolution because that
3 is outdated, and we certainly will be reconsidering the
4 resolution that Arctic Slope has in place. But unless
5 we -- we can say that this is the information that's been
6 provided to us from our staff, from our legal counsel,
7 this is a position that we have as an assembly.

8 So that's all I -- that's how far I'm going at
9 this point. But as we go through the process of dialogue,
10 certainly I will make additional comments.

11 DR. JIM KENDALL: Thank you. Do we have
12 any other elected initials in the room?

13 MR. DEAN WESTLAKE: I'm Dean Nunathraaq
14 Victor Westlake. I'm proud to say that I'm a borough
15 assemblyman and represent, among others, the City of
16 Kotzebue and the Northwest Arctic Borough School District,
17 both of which signed resolutions in support of offshore
18 development of the Chukchi Sea. So unlike Walter where
19 he's the borough president, I do have my constituents I do
20 have to answer for.

21 And I'm going to stop right there because I
22 really, really appreciate Earl Kingik coming down here
23 from Point Hope. Good friend of mine. I'm so glad you
24 are here, Earl, so thank you for making the time to come
25 down. It really means a lot to me.

1 You know, I started looking at the offshore
2 development of the United States, and I was surprised to
3 find that there are currently 3,848 producing oil wells
4 offshore on federal leases in the Gulf of Mexico and
5 another 8,000 or so within the State waters off Louisiana.
6 And we come to the development of all federal waters since
7 1960, and somewhere in the 58,375 exploration and/or
8 production wells drilled, we here in Alaska are counted.
9 They have done it before out here. So we are not new to
10 this.

11 In the past, we have had no ill effects from
12 this exploration. However, it does not -- does not --
13 absolutely does not lessen our concern about what goes on
14 out there. We depend on the Chukchi Sea and what it
15 brings to our dining table. It is very important to us.
16 But like anything that we do out here, we can only do our
17 best to safeguard against anything and not be ruled by
18 fear.

19 In reading Mr. Etkins' analysis of oil spill
20 rates, I was surprised to find that there is roughly
21 16,000 barrels of year of crude oil naturally seeping into
22 the Arctic. Sixteen thousand barrels of crude oil seeping
23 naturally into the Arctic. That seems like a lot of crude
24 oil to me. While I don't know and I wouldn't know
25 anything about drilling offshore, I can't help but wonder

1 if drilling might lessen the seepage rate, naturally
2 occurring seeps.

3 Naturally occurring asbestos, now, that I know
4 something about. We have project delays that are more
5 than a decade old in our region because of naturally
6 occurring asbestos. And because of this hazard occurring
7 naturally, our hands are tied in helping our own people
8 out here develop our resources, our buildings out there,
9 our homes. And it's thanks to well-intended government
10 regulations. No one wanted to stop these. It just
11 happened. We are trying to protect each other. But it's
12 to the exclusion of helping people build homes out on the
13 upper Kobuk.

14 This brings me to the emission standards that
15 are being contemplated now, as well. Our economic engine,
16 our whole reason for this building, this borough here, is
17 the Red Dog Mine. In applying a double standard for
18 offshore and onshore development, I worry greatly that in
19 the process of applying these different standards, Red Dog
20 Mine becomes ensnared in a web that would hinder or hurt
21 us as we, too, do our best to make our quality of life
22 better for everyone in the Northwest Arctic Borough.

23 So it really concerns me. We've seen this. I
24 know where Beistline -- I really, Sharon, appreciate the
25 statement you made there is we don't know how far it's

1 going to go. But by golly, the only reason we have got
2 what we have now, this whole borough, is because of
3 resource development out there.

4 I can't go hunting anymore anyplace without
5 gasoline. I mean, it's a simple fact. And I need it
6 to -- its symbiotic for me because I need my subsistence
7 lifestyle. I mean, most all of us in this room, our food
8 comes in out on the land or the sea. So thank you.

9 DR. JIM KENDALL: Other elected officials?
10 Sir, and your name, please?

11 MR. PATRICK SAVOK: My name is Patrick
12 Savok, and I'm a Northwest Arctic Borough assemblyman
13 representing Kotzebue. First off, welcome. I share a lot
14 of the key points as the president and assembly member
15 Westlake here. I also share a lot of the same issues that
16 Earl has because the only information that I've really got
17 about all this was from an e-mail group that I've got with
18 Earl. I met a female with him, and I was added to this
19 group to really get in tune of what was going on.

20 I was called this afternoon and approached this
21 evening about this meeting, so I was caught unaware of
22 what was going on, and didn't have time to brush up on
23 some of the aspects here, but two things that really
24 concern me, as the president said, was getting
25 justification from the legal system on how we can live our

1 lives here from people who don't come here.

2 You know, if you are not here, you don't see
3 what we are doing, but you need that oil. You will see
4 how much we need that oil. And I think it needs to be
5 echoed even further for those folks that don't come here,
6 as you said, those superior people above you, on the need
7 for that oil, but also the need for our subsistence
8 lifestyles.

9 I, too, am a hunter. I, too, am confined to
10 feed my five children and my wife by a high price of
11 gasoline. When we look at these types of operations that
12 have happened in the past, and we do see the seepage of
13 oil in our country, I, too, wonder if maybe some of the --
14 some of the release of that oil will maybe bring that down
15 because we have seen it in so many different areas.
16 However, having it in the middle of the ocean really
17 concerns me because the fact is it is our refrigerator,
18 our freezer to a great extent there. But I do understand
19 that we need that oil.

20 And I think that's as far as I'm going to go
21 with my comments.

22 DR. JIM KENDALL: Thank you, sir.
23 Appreciate it. Now, Earl, you have been mentioned a
24 couple of times, and you started us out with a blessing,
25 and we greatly appreciate it. Would you mind kicking the

1 general session open? And then we will go around the
2 room.

3 MR. EARL KINGIK: Dr. Kendall, I'd rather
4 let the community members here in Kotzebue do their
5 comments because I'll have my time in Point Hope. I'll
6 have my time in Barrow. I just want to listen right now.

7 DR. JIM KENDALL: Okay. Then, in that
8 case, Walter, we started on your side of the room. So the
9 gentleman to your right, if you care to make a comment,
10 what I would suggest is we go around the room. You can
11 comment or you can pass. And then we will keep going
12 around the room until we run out of things to say. That
13 way everybody has a chance to speak, they have multiple
14 times to speak. And someone may say something that
15 someone else wants to comment on. And I think that's
16 fine, too.

17 So if you don't mind, you can state your name
18 and say something, or you can pass. That's up to you.

19 MR. ANDY BAKER: Andy Baker. And I
20 just -- I agree with what Walter and Pat and Dean, they
21 have all said it. It's -- we have got a big balance we
22 have got to figure out. We need the economic development.
23 We need the jobs. We need the -- the benefits, but on the
24 other hand, we need to maintain our subsistence lifestyle.
25 So how do we do it? We can't -- we can't have one without

1 the other anymore. We can't go hunting on \$10 a gallon
2 gas. We can't afford to buy the gas, so it's a vicious
3 cycle, and just would like to figure out how we are able
4 to do both and see more of your presentation on where we
5 go.

6 DR. JIM KENDALL: Thank you for your
7 comment. And I'll echo something that Sharon said. If
8 you have time in the next few days to weeks to look at
9 that document, any -- and you looked at the section on
10 subsistence and you found something that was missing, send
11 it in and tell us because we know how important that is,
12 the subsistence, traditional knowledge. If we are missing
13 the boat, tell us. Even if it's just writing it on a
14 piece of paper and dumping it in the mailbox with our
15 address or regulations.gov, et cetera.

16 So if we can continue around the room. Ma'am?

17 MS. LISA PEKICH: I'm Lisa Pekich. I'm
18 with ConocoPhillips. And I'm, like Earl, just here to
19 listen. I'm not from Kotzebue, and just wanted to hear
20 the comments from the community, as well. Pass.

21 MR. COLE SCHAEFFER: I don't think they
22 should be allowed to do that.

23 MS. LISA PEKICH: I'll be commenting in
24 Anchorage. I know that.

25 MR. COLE SCHAEFFER: My name is Cole

1 Schaeffer. I'm the presidency [sic] of Kikiktagruk
2 Inupiat Corporation, the village corporation here in
3 Kotzebue. And I have a number of issues that I have with
4 the SEIS. To start with, I don't like the science that's
5 being compared, and particularly the stuff that they are
6 using in the Gulf in terms of pressures and that type of
7 thing because those are unrealistic in our neck of the
8 woods. We're not nearly as deep. There is a number of
9 issues with just the way that they are going about making
10 comparisons.

11 So if you are going to do a supplemental EIS,
12 you should do it in a realistic sense and not take bits
13 and pieces from other places because, you know, drilling
14 5,000 feet deep in the ocean and the pressures that you
15 are dealing with and the pressures underneath that where
16 the oil is at is completely different than drilling at 250
17 feet. And the same thing, you don't have the ice
18 conditions in the south like they did that we got up here.
19 So the technology on the other side of this is a concern
20 for me and making sure that we have the right kind of
21 technologies if there is a spill.

22 And we don't have any really proven technology.
23 There is a lot of design technology that will work in
24 skimmer systems and remote ROVs and stuff like that, but
25 there is nothing that's really ever had to have been

1 proven for a big spill, so -- I've done a little bit of
2 research on what kind of pressures you are looking at and
3 they are not nearly as bad as the stuff that was in the
4 Gulf, but there still could be high flow rates. So there
5 are some issues there.

6 And the concerns for the high flow rates and
7 spills like that is because of our subsistence lifestyle.
8 We live off the mammals from the sea and the fish. So
9 those are key to our survival here.

10 But we also recognize that in order for us to
11 move forward with our people, we have to have an economic
12 base, you know. And if the State and the Feds and we
13 don't get off our butts and figure out what we are going
14 to do, we are not going to have a pipeline that's going to
15 be flowing in 15 years. It's going to have too much wax
16 built up because there is not enough flow through it. So
17 we are going to have to do something.

18 Whether we get it out there or whether we get it
19 off ANWR or wherever else there might be, we are going to
20 have to do something; otherwise we're going to have to
21 change the way that that pipeline and the infrastructure
22 up there works because it's not going to work the way it's
23 designed.

24 We are not nearly at capacity now. We are not
25 going to be in ten years. We are going to be so far below

1 capacity that there's going to be all kinds of wax built
2 up on that system. So there's a number of issues there
3 that we have to look at, and we've got to look at it as a
4 whole because ultimately we have got to design a system
5 that's going to work for everybody. We have to be
6 sensitive to the environment, and if there is impacts,
7 then we have to be able to adjust and regulate based on
8 that. But we also have to keep moving forward because
9 it's not just Alaska. It's the whole U.S.

10 We are in an energy crisis, and if we don't
11 figure out how to quit depending on foreign oil, all they
12 have to do is have one more hiccup and our whole economic
13 engine in the U.S. is in the toilet. It will get tanked.

14 So we really have to -- you know, from the
15 Secretary's position, he's got to find a solution that
16 will work up here but, you know, we have to look at
17 investing in our own backyard. There is lots of oil. I
18 mean, you see what they are doing in the Dakotas and
19 stuff. There is lots of opportunities for finding some of
20 this stuff. You know, we probably have the biggest
21 resource of natural gas sitting out there, as well, and we
22 are not tapping into that.

23 So you know, I'm not pro development, but I'm
24 not opposed to development as long as it's done smartly.
25 And if there is issues, as long as we have ways to deal

1 with those issues, then we are okay because you can change
2 things so that our environment is protected. But we also
3 have to have an economic base. We have got to have cheap
4 energy.

5 I would challenge any of you guys that live
6 either in Anchorage or south to come live up here for a
7 winter and see how much it really costs to live here. And
8 when you have a \$1,000 stove oil bill a month, you start
9 thinking about how critical energy is. And right now
10 energy is a commodity. And to us it can't be. It has to
11 be a necessity for survival. And because of the way the
12 economic system works here, it is a commodity for sale.

13 So we need to look at -- we either have to have
14 so much out there that it doesn't become an issue anymore
15 or you have to change the system so that you don't have to
16 depend on it anymore. And we are not there yet in this
17 country. And we are not ready to go to alternative
18 energies as part of America's solution.

19 So this is the next best thing is to look at
20 where there is close opportunities and we have to take
21 advantage of them.

22 Thank you for your time.

23 DR. JIM KENDALL: Thank you. Sir.

24 MR. TOM FIELDS: My name is Tom Fields.
25 I'm from this area. I think it would be okay if you look

1 for oil on the land, but if you went into the ocean, look
2 what happened down there in Louisiana. I think if you are
3 at ten feet of ice and it happened underneath, that would
4 ruin everything. We have a nonprofit corporation here
5 called Maniilaq.

6 And there was a prophet that lived here about
7 150 years ago. He gave a number of predictions about this
8 area and what's going to happen. And one of them was a
9 whale is going to surface in the town of Ambler to get
10 away from the dirty ocean, and when that happens the day
11 will be cracked in half. We don't know if he's talking
12 about earthquake, atomic bomb or whatever, but when that
13 happens, that spill happens, there goes your subsistence
14 lifestyle. So I say don't give up the lifestyle. You
15 know, burn coal, get energy from the sun or the wind.

16 DR. JIM KENDALL: Thank you. Ma'am.

17 MS. SUSAN BUCKWELL: I'll pass.

18 DR. JIM KENDALL: Ma'am.

19 MS. MARCI JOHNSON: My name is Marci
20 Johnson. I'm a biologist with the National Park Service
21 here. And two of our National Parklands in the region are
22 coastal, and so we are involved with getting some baseline
23 research, learning about coastal lagoons, doing some
24 coastal mapping and trying to get preparedness for oil
25 spill response. And so we are certainly very interested

1 in this. And I just heard of this meeting a few hours
2 ago, so I haven't had a chance to look into it for a
3 couple items of interest for myself. So I'll have to read
4 it and submit something on-line.

5 DR. JIM KENDALL: That's great. Zach.

6 MR. ZACH STEVENSON: Sure. I want to
7 thank you all for coming up here far from home to be in
8 our beautiful community. I spoke with you earlier this
9 afternoon on behalf of the borough. For those who weren't
10 here earlier today, I was a little concerned that I had
11 only learned about this meeting at 4:30 yesterday
12 afternoon in leaving the office and would have liked more
13 time to get the word out to our community. It's a really
14 important issue.

15 My responsibility here, funded through BOEMRE,
16 Federal funding, is to develop an atlas that will be
17 stored here at the borough and available to the assembly
18 to help look at what areas are important for subsistence
19 in our region, as well as what areas are important for
20 resource development.

21 I think, as others have voiced, we face a
22 razor's edge issue here of keeping our subsistence economy
23 or subsistence resources strong, but also developing the
24 natural resources to keep our economy strong. We need to
25 do both. It's not a question of if or how, but -- or if,

1 but how do we do it right. And that's really the question
2 we are trying to address in this project here now.

3 That said, I'm not in a position to comment on
4 behalf of the borough or the planning department. As an
5 individual, however, I do feel the need for engagement.
6 Really engaging those communities that could potentially
7 be impacted by this project for better or worse is
8 critically important. And I provided you the names of the
9 seven villages that are currently working with our project
10 funded through BOEMRE.

11 So I, as an individual, continue to do the hard
12 work of getting the word out because I think the IRAs and
13 the city governments can go a long way in helping you
14 connect with folks in the local communities.

15 Again, thank you for your time in coming here.
16 And I want to thank the community, as well, for sharing
17 your thoughts on the important issue.

18 DR. JIM KENDALL: Sir, you have another
19 chance, if you would like.

20 MR. PATRICK SAVOK: Pass.

21 MR. DEAN WESTLAKE: Actually, ACMP. Are
22 you aware of the Alaska Coastal Management? Is that going
23 to have any effect out in what you do now if it goes away?

24 DR. JIM KENDALL: Not really, but --

25 MR. JOHN CALLAHAN: We still have the same

1 consultation requirements. Those aren't going to go away.

2 MS. SHARON WARREN: Well, the State would
3 give us a consistency determination on things. If that's
4 not there, of course, you can't get the consistency
5 determination if there is not enforceable policies there.
6 So, I mean, there is still consultation that goes on,
7 and -- but the -- but, yeah, we are kind of not quite
8 sure.

9 MR. DEAN WESTLAKE: And that one is kind
10 of -- we have got an opus. We have got a magnificent
11 masterpiece in Title 9, and I'm wondering if perhaps we
12 could further that along on the enforceable policy side
13 and be able to consult directly with the federal
14 government on these things from a borough level. Do you
15 think this would be possible?

16 MS. SHARON WARREN: I don't know. That's
17 a legal call, and I'm not -- I don't know.

18 MR. STEVE SCORDINO: I didn't follow your
19 question. I'm sorry. You said --

20 MR. DEAN WESTLAKE: I'm asking since ACMP
21 may go away, the question is, can we work within our
22 borough charters as a home rule borough over here to do
23 direct talks with you folks out here regarding what goes
24 on out here in our front yard, basically.

25 MR. STEVE SCORDINO: So we already do it

1 through the government-to-government consultations through
2 the tribal side. As far as the other part, policy-wise we
3 can decide to put in more, but legally we are not required
4 to. Just the lawyer answer.

5 MR. DEAN WESTLAKE: And I understand that.
6 I mean, it -- we are all in flux right now because we are
7 wondering how this goes, and I was hoping maybe there was
8 going to be an avenue that's going to be opened up. So
9 thank you.

10 DR. JIM KENDALL: Ma'am, would you like to
11 speak or --

12 MS. KARMEN MONIGOLD: Sure. My name is
13 Karmen Monigold. I'm from Kotzebue. I work for the
14 borough and I just started, so a lot of the history behind
15 any of this I really don't know. But I went to the
16 ConocoPhillips oil meeting. Was that last week? Won a
17 bunch of door prizes. People were really upset with me.

18 But I spoke there about how this is going to
19 affect our spirituality if there is an oil spill. And I
20 asked directly what are you putting into alternative
21 energy, renewable energy. And they started talking about
22 nonrenewable energy.

23 And I said, no, what about renewable energy
24 because I look at my children who I'm starting to get to
25 take out in the ocean, and we are going oogruck hunting,

1 and I'm just thinking, what if they don't have this.
2 Because when you are out there, you have a spiritual
3 connection with the earth that you don't have a price on
4 that. You can't put a price on that. And what is it
5 worth, you know.

6 I mean, drill on land. At least that -- you can
7 see when you have something wrong. You get in the ocean
8 and it could be too late by the time you figure out what's
9 going on. You can't predict the ice. You can't guarantee
10 that you are not going to have a spill, whether you do it
11 just in the summer. And so that would be my biggest
12 concern is you can't put a price tag on your spirituality.
13 You know, that's something that you are taking away the
14 person's inner self if you screw up that ocean. You are
15 wiping out a whole culture.

16 And that's all I have.

17 DR. JIM KENDALL: And if you have time and
18 you take the document and look at it, go through that
19 document, see if that can be inserted some way to --

20 MS. KARMEN MONIGOLD: Definitely. I just
21 got the document, so --

22 DR. JIM KENDALL: Thank you. Thank you.

23 MS. KARMEN MONIGOLD: I will try to read
24 it as fast as I can.

25 DR. JIM KENDALL: Thank you very much.

1 MR. BRUCE ST. PIERRE: Good evening.
2 Bruce St. Pierre, S-T. P-I-E-R-R-E. I'm with
3 ConocoPhillips, also and primarily here with Lisa, as we
4 would like to listen to the community and know what the
5 concerns are because we do have a program that we would
6 like to put forth to the government. We have purchased
7 leases in the offshore, and we have plans to put
8 applications in later this summer. And our goal is to get
9 out there and do some exploration with a jack-up rig in
10 2013.

11 So we have a program and we have been around the
12 community and done community visits and meetings. As the
13 young lady was saying, we were here earlier in June, and
14 we did talk a lot about oil and gas, but our company also
15 is involved in biofuels and other alternatives.

16 We just -- that is -- our primary business line
17 is oil and gas today. Ten years from now, 20 years from
18 now, who knows what it could be. But that's what our
19 primary business line is. And it's a lot to do with the
20 BTU value of the energy that's demanded. And as the
21 gentleman was saying over here, a lot of the alternative
22 energy resources are good, but they have a long way to go
23 to catch up with what the demand is of the populace to
24 fuel the systems that we have put in place.

25 And it's the same thing I tell my two daughters,

1 two young daughters, both interested in the environment
2 and the ocean in college. And I say, you guys are the
3 generation that need to start looking at these other
4 processes that will be able to take care of the needs of
5 the communities that you live in.

6 So again, we are here to hear community
7 concerns. I have reviewed the document. We will be
8 putting some formal comments together in writing to supply
9 by July 11, and we will also be giving a written statement
10 at the end of the month when you have your Anchorage
11 meeting.

12 Generally as a company we support the NEPA
13 process. It's very thorough. There is -- every stage of
14 the way in your five-year plan, in your leasing document,
15 and then again in the exploration phase there is a NEPA
16 process. And in most cases it's a full-blown
17 environmental impact statement. Some cases it may call
18 for an environmental assessment. But every stage allows
19 public comment, public input. The companies try to
20 provide as much data as we have.

21 As a company, ConocoPhillips has spent the last
22 four summers, this being the fourth, out in the Chukchi
23 gathering data on a local basis on these leases. A lot of
24 that is voluntary. We do that to gather data to
25 understand more about what the environment is like, where

1 we are going, what we are going to do, and how our actions
2 would impact.

3 We understand strongly that there are big
4 concerns about spill response and about having a spill out
5 there, and we understand why the communities and people
6 are concerned about that because it is a risk. And we are
7 trying to do everything we can in the prevention mode to
8 put together a plan that shows that we will have the kit
9 of equipment available in the event something goes wrong.
10 But more importantly, we are putting a lot of energy into
11 prevention measures, into ways that we can prevent any
12 type of accident from occurring.

13 I think the other thing is we do learn a lot
14 going to communities about their own traditional
15 knowledge, things that we as Western-style educated people
16 don't hit on and we don't understand. And by going out
17 and working in some of the communities around wildlife
18 captures, things to do with studies out there, we have
19 people on the vessels that are from the communities
20 helping us, and we learn more about the area as an
21 explorer.

22 And the final thing I would like to say is the
23 timing. Alaska is a very unique place. It's a precious
24 place. I've lived here my whole life. I was raised north
25 of Anchorage in an area called Chugiak from the time I was

1 six years old, and I consider it my home, too. I consider
2 it a very special place.

3 So when we go out to put plans in, there is a
4 thorough review of those plans. And in addition, if you
5 compare it to an analog or another project like maybe in
6 the Gulf of Mexico or somewhere else, typically they go
7 through the lease sale and, within a year, six months to a
8 year, those companies are out drilling on those leases.

9 In this case, we are coming up on year four
10 because the sale was in February of 2008. And I think
11 between our company and the other companies that want to
12 operate out there, yes, the court system has been used to
13 push things back, but companies have been patient in
14 trying to understand what the concerns are and trying to
15 address those concerns before we get out there to do the
16 work.

17 And we also recognize that you will never make
18 everyone happy, that everything you do, there are still
19 people that have philosophical differences. And I respect
20 that because that's what makes our country great is that
21 we can go out in a meeting like this, some people agree,
22 some don't disagree; but you hope at the end of the day,
23 you look at the science that's available, you evaluate the
24 risks, and you come up with a very safe plan to go out and
25 do the operation.

1 So as a company we will be moving forward to
2 supply these applications, work with the communities,
3 understand the issues, and we hope to be able to go out
4 and look for this resource during the summer of 2013.
5 That's our goal.

6 Thank you for the opportunity to comment
7 tonight. And like I said, I'll be giving more comments at
8 future meetings.

9 DR. JIM KENDALL: One little sidebar here.
10 Three individuals have now mentioned renewable energy, so
11 I just want to point out that our bureau, the bureau of
12 Ocean Energy Management, Regulation and Enforcement,
13 BOEMRE, is also responsible for renewable energy on the
14 Outer Continental Shelf in terms of wind, wave, current,
15 even solar.

16 And right now, maybe even this week -- I know
17 there is a lot of meetings going on on the East Coast
18 looking at where you could put wind farms, where you
19 should not put wind farms. Also the Pacific Northwest
20 there are some states, I think Oregon and Washington and
21 maybe California are looking at wave generators. So we're
22 pushing that through. Again, though, it's driven by where
23 the energy is needed, what technology is available.

24 So I don't want to eat up too much time on that,
25 but we're moving in that direction we will take comments

1 on that, too. We all need help. With that, Earl, would
2 you like to address the crowd?

3 MR. EARL KINGIK: I'll just say, the Point
4 Hope community, once we get offshore activity in the
5 Arctic, Point Hope has said no for over 20 years. Hope
6 Basin is the largest natural gas oil field out there right
7 outside of Point Hope, and it could be connected to the
8 Chukchi.

9 Our Elders decided in 2008 when a lease sale was
10 coming up that we needed somebody to fight this very
11 important issue called the garden we love the most, the
12 garden that provides food for our community, garden that
13 puts food on the table, the garden that keeps our cultural
14 way of life together, the garden that keeps our people
15 united and be peaceful. We are part of the ecosystem here
16 in the Arctic, and we still want to be part of the
17 ecosystem. If the Creator hadn't made his decision for us
18 to live up here, we would live elsewhere, and they can do
19 anything they want. But the Creator put us there so let's
20 keep it the way it is.

21 There is a lot of hot meetings going on right
22 now. There was a Shell Oil meeting yesterday, Chamber of
23 Commerce, getting ready to plan. They got this Arctic
24 Summit meeting going on which I wanted to attend that's
25 going on in Anchorage right now. Hardly anybody from the

1 north attends these meetings.

2 So you see, it's important that the Bush era
3 should be wiped out and the new Obama era should come
4 forward and deal with what we have to deal with.

5 I had a chance to go down to Deep Horizon [sic].
6 It was sad. It was sad to see people down there. How sad
7 it will be if our ocean ends up the same way. There is
8 30,000 people cleaning up that oil field -- oil spill.
9 They got airports, they got equipment to do cleanup; but
10 up here in the Arctic, we are not ready. We are not ready
11 for any kind of activity in the Arctic. We are not
12 prepared.

13 The Alaska Coastal Zone Management Plan has
14 still got to be in place. We need to look forward to that
15 because there is going to be community involvement. Coast
16 Guard will be looking for a deep harbor. There is a lot
17 of things going to be happening in the Arctic, not only
18 the oil field, but the tourist ships will be coming in.
19 The transportation route will be open to the Europe and to
20 the Russian side.

21 So you see, us people in the Arctic, we need to
22 protect our way of life. We need to be involved any kind
23 of decision they are going to be making.

24 Thank you very much, Kotzebue, for giving me a
25 chance to speak here. Thank you.

1 DR. JIM KENDALL: Thank you, Earl. And
2 with that, we are going to go circle around again.
3 Walter, if you would like to say anything more, we will
4 start.

5 MR. WALTER SAMPSON: Yes. I'm going to
6 speak for myself as an individual, Walter Sampson. It's
7 good to hear and listen to the perspective of different
8 views. Certainly something that we all need to respect
9 the viewpoints of everybody, what's been brought to the
10 table.

11 You see what's happening today in the world. We
12 are really in a changing world, climatic changes that's
13 occurring. It's not only ice that we should fear or have
14 fear of. Tornadoes that's happening down south, flooding
15 that's occurring down south. These are natural
16 occurrences that are -- that are happening. Ice is
17 receding up north. That is -- is something that we also
18 need to consider.

19 In the past we have always been planned for by
20 the State and the federal government. At one point we
21 said, well, we are tired of reacting to plans that
22 don't -- don't help our way of life. We are tired of
23 reacting to that. So one day we finally said to the State
24 government and to the federal government, if there is
25 plans to be designed that will have an impact on our way

1 of life, we are going to sit on the table with you to be
2 part of a design that will help us, as well. And that's
3 basically what's happening today.

4 We have been provided information by oil
5 industry, a lot of information, a lot of information that
6 pertains to what's happening, a lot of information that's
7 been requested by interest groups. Oil in -- oil drilling
8 has occurred up north in the past. At what point have we
9 responded to any of that with some of the issues that's
10 before us? Not really. But the change of communication
11 and change of providing information certainly has -- has
12 made a change.

13 What's happening in the Arctic, not only in
14 Alaska Arctic, but also in Greenlandic waters, the
15 drilling that's occurring on their shores in the Arctic
16 with the support of their people that's occurring today.
17 They see the partnership, the benefits that they see for
18 their people. We heard from past testimony from past
19 information. Yes, we want to listen to. We want to
20 partner with you. We want to work with you.

21 That's the opportunity that I see for my
22 children. We are not going to be around for too many
23 years. It's the children that will be provided that
24 opportunity.

25 And not only that, what we are doing today is we

1 are planning for them, which hopefully they can nurture
2 down the road to even make that plan better as to how
3 things will happen in the Arctic. So it's critically
4 important for all of us to be part of a process in
5 designing what's happening in the Arctic.

6 I've gone to Shell meetings. I've gone to
7 Conoco meetings. I've gone to some oil industry meetings
8 in general. Information is there. Information has been
9 provided. We have been told they want to partner with us.
10 We have been told they want to work with us, an
11 opportunity for us to make sure that the issues that are
12 in place be incorporated into a design of a plan.

13 Any concerns that we -- you may have, make sure
14 that input is in place so it can be incorporated into that
15 design. That way if something should happen, I wouldn't
16 be able to point a finger at BOEMRE or oil industry. All
17 I would say is well, we messed up. Let's fix the problem.

18 And I think that's -- that's an opportunity that
19 we have today. That's my personal views for now. Thank
20 you.

21 DR. JIM KENDALL: Thank you, sir. Sir,
22 would you like to take another chance?

23 MR. ANDY BAKER: I'll pass for now.

24 MS. LISA PEKICH: I'll pass.

25 MR. COLE SCHAEFFER: I don't think you

1 should allow her to pass a second time.

2 DR. JIM KENDALL: At least we have got a
3 nice, communicative, humorous group here. That's good.
4 He wouldn't admit that he was that Walter Sampson. He was
5 messing with me.

6 MR. COLE SCHAEFFER: Walter hit on a good
7 point, and that is that we have to look at our future
8 generations. And if we don't find an economic base for
9 them, Anchorage is going to get bigger and Fairbanks is
10 going to get bigger.

11 We already have an outward migration of people
12 from the villages because we just don't have the
13 infrastructure or the low energy cost to build economic
14 development here in rural Alaska. So if we don't look at
15 that, our villages are going to get smaller and our urban
16 centers are going to get bigger. So we have got to find a
17 balance that works for us as a people as well as the rest
18 of the country.

19 And Walter is correct, there are a number of not
20 only oil companies, but even environmental groups that
21 want to partner with us to make sure this is done right.
22 They don't want it to happen in some cases, but history
23 has proven that we will move forward. So the question is
24 how do you -- how do you move forward and, instead of
25 being the problem, be part of the solution. And that's

1 what Walter is getting at.

2 And even the environmental groups that are
3 opposed to drilling and stuff are starting to realize
4 that. And ultimately, as a community and as a people in
5 the U.S., we will have to be able to make decisions that
6 will better our future generations, so it's important that
7 these processes work.

8 So your guys' visit here today is really
9 important because it helps start that process. Thank you.

10 MR. TOM FIELDS: I think what Karmen said,
11 the spirituality of things here, we lead the world, I
12 think, in suicide per capita up here, and we pay, what,
13 six, \$700 for a round trip to Anchorage. You can go to
14 New York for 300 bucks round trip. You know, 11, \$12 for
15 a gallon of milk here. So the people here are really
16 hurting, and it's not fair because they own the land, or
17 supposedly did before it became parks and whatever. And
18 yet they are paying the most price.

19 And then the environmental changes, global
20 warming. The record, I think, for snow used to be 40-some
21 inches here. Two or three years ago they got 150, or
22 something like that. That shows you the changes. And I
23 have been gone for a while, and I came back and I can see
24 the ocean rising. And I mentioned this man in Maniilaq.
25 He talked about Noorvik flooding. Noorvik is on a hill up

1 the river, and if it floods up there, that's a lot of
2 water that's got to go all over the place here.

3 And there is no way -- it scared me for that
4 gentleman to say we are getting ready, we will do it
5 right, and don't worry, we will save it. Why think that
6 way, you know? Because you can't save it. I mean, you
7 are going to dig through ten feet of ice to get to a
8 broken well? There's no way you can do that.

9 I just say drill on the land and deal with that.
10 Don't go into the ocean, man, because the ocean is life
11 blood of the world. We are 70 percent water. That's why
12 we are comfortable, you know, living next to the ocean.
13 That's it.

14 DR. JIM KENDALL: Thank you. Ma'am, you
15 have another opportunity.

16 MS. SUSAN BUCKNELL: I'll pass.

17 DR. JIM KENDALL: Park Service colleague?

18 MS. MARCI JOHNSON: Park Service aside, I
19 wondered if I could ask a question. It's a big document
20 so it might take me a minute to find it in there, but it
21 seems, hearing talks about the planning and the process
22 from the industry side also, I -- does this environmental
23 impact statement -- this statement, does it process or
24 consider, you know, the cleanups of spill for a tanker or
25 the pipe -- in a planning for a pipeline route, as well,

1 or is it just directed towards the exploratory drill sites
2 right now?

3 MR. MICHAEL ROUTHIER: The scenario that
4 we analyzed is a blowout during exploration drilling. And
5 our analysis is an environmental effects analysis. So it
6 focuses on how the animals and the waters and things like
7 that would be impacted. We -- this document isn't about a
8 full analysis of all the different spill techniques. We
9 discuss them, we identify them, we describe them, we talk
10 about how they might be used. But this is more of an
11 environmental effects document, not an engineering
12 document. So we don't go into great detail on that
13 because right now we are still at the lease sale stage.

14 We don't know where an exploration well would be
15 drilled. I mean, we could hear companies talking,
16 proposing a couple different sites, but we don't know
17 exactly where they would drill. We don't know where any
18 platforms would be, any pipelines would be located. It's
19 still fairly early in the process. So at this stage, we
20 are more focusing on the environmental impacts.

21 DR. JIM KENDALL: That hit on something
22 very important. If the lease is affirmed by the
23 Secretary, then there is an exploration plan, correct,
24 Mike?

25 MR. MICHAEL ROUTHIER: Yes.

1 DR. JIM KENDALL: And there is more NEPA
2 done and more analyses. It's a continuous process. And
3 then when it comes to development, okay, there is more
4 NEPA done and more plans for pipelines. Am I saying that
5 right?

6 MR. ROUTHIER: Right.

7 DR. JIM KENDALL: I'm not a NEPA
8 practitioner. I know NEPA, but I'm not an expert. The
9 experts are sitting right here and the others around the
10 room. So this is just a first start looking at the lease
11 sale, then the exploration, then development, and then
12 production. And believe it or not -- and I've seen this
13 in the Gulf and in California -- that when the resource is
14 exhausted and you have to decommission, there is also more
15 NEPA done on how to remove the structures and return the
16 sea floor back to the way it was. That's a long-winded
17 answer.

18 MS. MARCI JOHNSON: If you wanted to get
19 the nitty gritty on what would happen if there was a
20 tanker spill, where is the infrastructure for that and
21 what kind of resources would you have regarding the
22 shipment of this either on tankers or pipelines? You are
23 saying that comes later after there is exploratory drills
24 on site, or at what stage does that come in?

25 MS. SHARON WARREN: To also explain, this

1 supplements a final -- we did a final environmental impact
2 statement for the sale, and that took into consideration a
3 spill from a pipeline and from a production. And so
4 this -- this document supplements the one that we did in
5 2007. So the one in 2007 would discuss those things.

6 MR. COLE SCHAEFFER: I want to comment on
7 that because you guys, in your analysis you put in 60,000
8 barrels of spill, and there is no way that the -- that
9 area can produce that kind of pressure. So why would you
10 put that in there?

11 MS. SHARON WARREN: Because our
12 geologists, actually, when they were looking at the
13 hypothetical and looking at the reservoir area of the
14 Chukchi Sea and appendix D of the document explains how
15 they came out with the flow rate. And the flow rate is --
16 is what was the driver of the spill -- I mean, this
17 hypothetical spill. So it -- you talk about the Deepwater
18 Horizon.

19 MR. COLE SCHAEFFER: But when you look at
20 the science of it and you take the science from whether
21 it's oil companies or anybody else that's actually doing
22 the drilling and you look at what they say the flow rates
23 are, you are 40- to 50,000 gallons or barrels off.

24 MS. SHARON WARREN: I guess that's what I
25 would ask you --

1 MR. COLE SCHAEFFER: That's why there is
2 science there.

3 MS. SHARON WARREN: That's what I would
4 ask you to do. Appendix D explains how the agency came up
5 with the hypothetical, what they used, what the geologists
6 used, what the resource specialists used and how they gain
7 that. So after you -- if you read that, if we have missed
8 something based on what they are saying in there --

9 MR. COLE SCHAEFFER: But in your analysis
10 you are comparing apples to oranges, and you can't do
11 that. You can't take the Gulf spill and use that as your
12 example because it's a whole different environment. And
13 that's what you are doing. You are comparing apples to
14 oranges.

15 MR. MICHAEL ROUTHIER: Like when I
16 discussed the public comments we got on the draft SEIS,
17 part of the desire on behalf of a lot of people who
18 commented was to see the really catastrophic scenario. So
19 when we decided to do this very large oil spill scenario,
20 we didn't want to get into a situation where we analyzed,
21 say, a specific well and then someone would come back and
22 say, well, there could be something bigger out there. We
23 want to make sure we captured something very catastrophic.

24 So our geologists, they looked at an actual
25 place in the Chukchi Sea, a place that does exist. But

1 then what they did is they maximized all the other
2 variables. So yes, the estimate is huge. And like we
3 were discussing before when we were discussing the
4 differences between the very large spill scenario and the
5 worst-case discharge, there we briefly discussed how a
6 worst-case discharge that regarded a specific well with
7 specific technology and an actual location would probably
8 be a lot smaller. So --

9 Dr. JIM KENDALL: That's where the science
10 comes in, right?

11 MR. MICHAEL ROUTHIER: What you are saying
12 is true in that sense.

13 MR. TOM FIELDS: So you are still
14 expecting a spill, then.

15 MR. COLE SCHAEFFER: No. You just have to
16 plan for it. That's the whole idea behind it.

17 MR. PATRICK SAVOK: And if I may
18 interject, now you guys talk about these lease sales, but
19 you don't know the GPS coordinates of these lease sales
20 and you project an oil spill that's going to be
21 catastrophic based on scientific data from a different
22 location. Me, as a local person, I'd rather feel
23 comfortable -- and I know you can't really discharge
24 anything to test it, but there's got to be some form of
25 measure, as what Cole is saying. When you are doing these

1 types of tests, when we don't know these GPS locations, it
2 gives me that much more uncertainty and untrust towards
3 the process of having your information passed onto the
4 Secretary to make a final determination on if this is
5 going to go or no-go when there is still that big gap here
6 for understanding, not only me, but all these communities,
7 not only these, but up north, down south.

8 DR. JIM KENDALL: You are asking for the
9 location of the sale, the lease blocks?

10 MR. PATRICK SAVOK: He was mentioning
11 about the GPS locations of these different wells and the
12 lease sales. He said he didn't know those a minute ago.
13 Maybe I misunderstood that, but --

14 DR. JIM KENDALL: It's a concept that is
15 difficult to grasp, so I'm going to ask Mike to do it one
16 more time and describe it, that we have the very large oil
17 spill. It's a generic spill for the absolute worst thing
18 that could happen. Then we are going to go to an
19 exploration plan where we know the absolute locations.
20 What did I miss?

21 MR. MICHAEL ROUTHIER: Well, yeah, the
22 very large oil spill that we analyzed here, the intent was
23 to capture what is the biggest possible theoretical
24 hypothetical spill that could happen from anywhere in the
25 planning area. When you get to actual plans to drill a

1 well, now you are in a specific location, you are using
2 specific technology and so forth. So instead of
3 maximizing all the variables that go into calculating a
4 very large flow rate and flow volume, now you could plug
5 in more actual variables from a very specific project.
6 And that's going to tend to produce a smaller flow rate
7 and a smaller volume.

8 MR. JOHN CALLAHAN: Patrick, the reason
9 why we don't know the location of the wells, as you said
10 earlier, is because we are not at that stage yet where the
11 companies tell us exactly where in their tracts they are
12 going to drill. That comes later. So we will know
13 exactly where they are going to do it. We just don't know
14 yet. We're not at that stage in the process.

15 MR. MICHAEL ROUTHIER: We're trying to
16 cover the entire lease sale area right now. Only later
17 will companies be able to propose specific locations, dots
18 on a map.

19 MR. PATRICK SAVOK: So the lease sale
20 occurred, yet we don't know where they are at? Did I
21 grasp that correctly? Because that's what I heard.

22 MS. SHARON WARREN: That is what you
23 heard.

24 MR. PATRICK SAVOK: That is what I heard.

25 MS. SHARON WARREN: The lease sale

1 occurred. We have leases out there. We have 487 leases
2 out there. And of those 487 leases, just when we are
3 analyzing -- so if you step back and you look at the lease
4 sale area, it was 29.3 million acres that we were looking
5 at offering. I can -- well, in fact, that's what the map
6 was was sale 193. The alternative 4 that was selected at
7 the time of the sale offered 29.3 million acres.

8 So out of that entire area that we -- that we
9 are considering, we don't know -- let's just take back in
10 time -- we don't know where exploration activity would
11 happen in this huge area.

12 So when we did this very large oil spill
13 analysis, it's to take -- it's a hypothetical. It's to
14 consider -- it's like in the middle of the Chukchi Sea
15 planning area, which is a very large planning area, and so
16 that way it can build on this is -- this is what the
17 biggest would be based on the information that our
18 geologists had using information from wells that were
19 drilled before, using information from reservoir, using
20 information from seismic data that's been collected out
21 there, going -- you know, kind of looking at different
22 things. So it is based on data, but it's still
23 hypothetical because you don't know.

24 So that's why that was selected to say, okay, at
25 the lease sale stage, we don't know where companies are

1 going to go actually out and drill. Soon when we are
2 looking at this area, it's kind of like in the central
3 area of the Chukchi planning area so that we can do an
4 analysis of here is what would happen if there was an oil
5 spill based on Alaska information, based on the Chukchi
6 Sea planning area information. And that's what we were
7 looking at when we did that.

8 As we go through, you know, as -- there is
9 four -- the OCS Lands Act cause -- provides for four
10 process. We have the five-year program. We have -- and
11 then in the five-year program there is lease sales that
12 the Secretary decides, and then -- and Bruce brought this
13 up. Then the next stage is the lease sale stage, which is
14 where we are at now. And then after that stage if the
15 leases are issued and they are able to go out there, there
16 is an exploration stage.

17 And at the exploration stage that's when
18 companies will come in on their leases and provide the
19 exploration. There is a notice to lessees, No. 6, that
20 was out there based on the Deepwater Horizon that says,
21 companies, you need to provide us a worst-case discharge
22 when you go out there, a blowout description of what you
23 can do. That has to be included as part of their
24 exploration plan.

25 So that's why we are saying this very large oil

1 spill is a scenario, but when you get to the exploration
2 stage, they are going to do what they call worst-case
3 discharge, which is going to be specific to a well,
4 specific to the pressures in that well and, in all
5 likelihood it is expected it will be much less than the
6 hypothetical. So when we go through our NEPA review, we
7 look at an environmental impact statement. So we do an
8 environmental impact statement for the sale.

9 When we get to the exploration stage, we are
10 going to do another NEPA review, and in that NEPA review
11 we are going to start out with an environmental
12 assessment. And we are going to tier to the environmental
13 impact statement that has already been done, and we are
14 going to look at that based on the environmental
15 assessment and to say, okay, are there any -- is there
16 significant impacts that we did not address in the
17 environmental impact statement. Okay.

18 So in this environmental impact statement, we
19 are looking at a very large oil spill. So when we do the
20 environmental assessment on the exploration plan and we
21 look back saying, oh, no, no, we took those in
22 consideration. We know that the significant effects are
23 going to be -- there is no new significant effects that we
24 as an agency have not already addressed. And so we would
25 then stop at the environmental assessment.

1 If at that stage we said, oh, gee, we did not
2 address the significance in that environmental impact
3 statement, then we would -- that -- NEPA would be -- we
4 would be looking at doing an environmental impact
5 statement.

6 So it's a tier process where you start broad
7 with the environmental impact statement, looking at a very
8 broad, very -- catastrophe that you are looking at. And
9 then when the exploration plans come in -- because when
10 the exploration plans come in, there is a process under
11 the OCS Lands Act that once we deem that exploration plan
12 submitted, we have 30 days in the OCS Lands Act to either
13 approve it, have the companies modify it, or disapprove
14 it.

15 So with us doing the environmental impact
16 statement at an earlier stage, then when an exploration
17 plan comes, we will do the environmental assessment and
18 then tier off of the environmental impact statement.

19 DR. JIM KENDALL: We are not there yet.

20 MS. SHARON WARREN: And we are not there
21 yet.

22 MR. WALTER SAMPSON: So basically what you
23 have, what you have, then, in places is that before --
24 really the reality of things is production really is about
25 15 -- 15 to 18 years down the road before anything is --

1 is pumped out of under the water. So there is still time
2 to review --

3 MS. SHARON WARREN: Right.

4 MR. WALTER SAMPSON: -- what needs to be
5 reviewed down the road.

6 MS. SHARON WARREN: Right. And there
7 is -- and with this four-stage process, each stage there
8 can be changes. Things can be conditioned on certain
9 things. We have the regulations. And yes, things are
10 being looked at specifically each time, even at a
11 development stage. You are going to look at, you know,
12 the environmental review. It's going to look at the
13 pipelines, everything else, very specific to that project.
14 Lots of public involvement, you know, and comments on
15 how -- how it would be.

16 Sometimes those development plans and the
17 environmental impact statement can take years to review
18 and also to get the information on where the project is
19 going to be. You know, there is -- there has been a lot
20 of times that, you know, in 30 years -- look at it this
21 way. In 30 years that we have had the Outer Continental
22 Shelf, we have one development project that we share with
23 the State of Alaska, and that's Northstar. Liberty is not
24 on line yet. That's it.

25 There has been exploration wells drilled. More

1 have been drilled in between -- in the Arctic than in
2 other areas but, you know, we have had quite a number of
3 lease sales over the years. So it's not -- the OCS Lands
4 Act is set up so that the Secretary and us, as an agency,
5 can look at each of these steps as a process to take a
6 look at, you know, is this the right way to do it at this
7 time or not. The Act provides that, you know. And the
8 Act provides that at the end of the day, if there is going
9 to be significant harm to the environment even after you
10 do all of this, the Secretary can cancel leases even as
11 time goes on. So the Act provides that authority to the
12 Secretary.

13 DR. JIM KENDALL: And the time.

14 MS. SHARON WARREN: And the time.

15 DR. JIM KENDALL: And that was a good
16 question before we go back to the circle. I'm sorry.
17 Walter mentioned it could take 15 to 18 years to produce.
18 That's also time to do more science and more studies.
19 When I was in the Gulf and I started as a graduate student
20 back in the '70s, things like chemosynthetic communities
21 were not known. We didn't know there was issues with
22 sound in marine mammals. And yet they were drilling. And
23 so that research then was ramped up. So that's why with
24 this long gap, we are continually learning. We are
25 continually adding our information.

1 But we have said enough. We need to go back.
2 Zach, we stopped at you. Did you have anything else you
3 want to wanted comment or question on, please? Sorry to
4 interrupt.

5 MR. ZACH STEVENSON: These are more two --
6 more procedural questions. And I wouldn't consider them
7 necessarily public comments as much as perhaps BOEMRE
8 might be able to help me understand. To what extent is
9 through BOEMRE and Department of Interior able to provide
10 more consultation, given the Administration's support for
11 government-to-government relations now, increasing that
12 effort? For example, if there were to be an interest at
13 the village level for getting some consultation with
14 BOEMRE about the proposed lease sale and the NEPA process,
15 are there resources available to provide for that? That
16 was my first question.

17 And secondarily, along those same lines, were
18 there interest from the borough to bring you back here to
19 provide more information on what you are sharing this
20 evening, is that capacity there?

21 DR. JIM KENDALL: You mean capacity in
22 what way?

23 MR. ZACH STEVENSON: To share information
24 on the public comment process, the potential alternatives
25 and ways in which the public can engage the comment period

1 in light of the July 11th time frame. Is that --

2 DR. JIM KENDALL: We are as open and as
3 transparent as we possibly can be under the time frame.
4 You can use, as Sharon pointed out, regs.gov where
5 comments go on-line and they are, in a short order,
6 available for everyone to see. We look at each and every
7 one. We try to come out to the communities as often as we
8 can. I know the communities are very busy, and we know
9 sometimes there is meeting fatigue. Conoco comes, Shell
10 comes, Park Service probably has meetings, Fish & Wildlife
11 has meetings. We all have meetings. And we will come as
12 often as we can.

13 And my -- I'm the new Regional Director and I've
14 told this to environmental groups. I've told this to our
15 colleagues in the oil and gas industry. My door is always
16 open. Now, you want us to come down, we come down. You
17 want to come back to visit us, come visit us. And I'm
18 talking with my hands. I'm sorry.

19 MR. ZACH STEVENSON: Thank you so much.

20 DR. JIM KENDALL: Does that answer your
21 question?

22 MR. ZACH STEVENSON: Absolutely.
23 Absolutely.

24 DR. JIM KENDALL: My colleagues who have
25 been with the region a lot longer than I, where have I

1 misspoke?

2 MS. SHARON WARREN: Oh, you haven't. We
3 have the comment period till July 11th. Today is the
4 solstice. So we are going to be in hearings until the
5 30th of June, so there is an additional 11 days out there
6 that -- fly back. We try to keep away from the 4th of
7 July because, you know -- and plus coming out when you're
8 doing subsistence, too, we know also that people are out
9 there doing subsistence.

10 DR. JIM KENDALL: This is very awkward for
11 the communities, we understand.

12 MS. SHARON WARREN: So we will definitely
13 do what we can in the time that we have and come back out
14 here. I don't have a problem at all. I like coming out
15 here.

16 MR. ZACH STEVENSON: Thank you.

17 MR. PATRICK SAVOK: Okay. I guess what
18 I'd request, then, due to the lack of time, constraints
19 and everybody's meetings, KOTZ Radio. Let everybody know
20 what's going on. Give them a brief synopsis. Let them
21 know the game plan and give them the website for comments.
22 That will save me a lot of time with my constituent base,
23 as well as Walter and Dean, I'm sure, as well as everybody
24 else in the room where everybody who has computer would
25 like to comment would be able to comment to share their

1 side, so to speak. Thank you.

2 DR. JIM KENDALL: Well, in that case, we
3 have Michael Haller, who is our community liaison, and
4 we've got John Callahan from the Office of Public Affairs.
5 And I understand you are from the radio station. Make
6 them your best friends. Anything you need to know --

7 MR. MICHAEL HALLER: Every day is a double
8 mug day.

9 DR. JIM KENDALL: Our job at BOEMRE, we
10 are not making the decisions. Our job is to collect the
11 information and make it transparent so people know what we
12 are doing, feed that information, these concerns to the
13 decisionmaker. As we all know, transparency doesn't mean
14 everybody gets what they want, but everybody has a seat at
15 the table. Everybody's voices need to be heard. And
16 everybody needs to see how the decision was made.

17 MR. PATRICK SAVOK: Clear, concise
18 communication in a constructive manner will get you that.

19 DR. JIM KENDALL: And she's writing that
20 down. That would be a good tee-shirt. Thank you.

21 Ma'am, anything you want to add, please. We
22 have got time here, and I know you are thinking.

23 MS. KARMEN MONIGOLD: It kind of jumps
24 back to, they are talking about looking to our future and
25 our children from an economic standpoint. Cole mentions

1 we pay the highest rates everywhere. How is drilling off
2 of our shore going to benefit us? It's not we. Are still
3 going to pay the highest. We always do. And that's okay.
4 I mean, to me I'd rather pay \$50 for a gallon of gas than
5 to worry about not being able to go out hunting and get
6 the food that I need. That was one point.

7 And then the other point is, after the drilling
8 and it's all gone, we are still going to be here. Our
9 kids are going to be here. Our families are going to be
10 here because we are connected to the land. If you damage
11 what we live off of, what are we going to do? Where are
12 we going to go? We are all going to go to where it's not
13 damaged.

14 And you want to talk about suicide rates now,
15 just imagine what it's going to be then for the few that
16 cling to their culture and it gets sustained from.

17 But I don't see how drilling off the oil is
18 going to benefit me economically except for maybe my PFD
19 will go up, Maniilaq will get more funding for whatever
20 and from the State and jobs, yeah, but I mean it's --
21 there has got to be a better way than to go into our
22 ocean, you know, because you damage that and, I mean, that
23 takes years and years, if at all, to ever recover. So --

24 And then my other question -- I had another
25 question, but I might save it till I read this because it

1 may have to do with Arctic drilling and what the history
2 is of that. So --

3 DR. JIM KENDALL: So we can count on
4 getting some comments. Really. This is really, really
5 important. Okay? Thank you.

6 MR. BRUCE ST. PIERRE: I've said my piece
7 and I will pass, but thank you for the opportunity.

8 DR. JIM KENDALL: Earl.

9 MR. EARL KINGIK: Earl Kingik. Wow. This
10 is the best BOEMRE meeting I have been to. I went to a
11 BOEMRE meeting one time, and I was the only person that
12 went to the meeting. I fly all the way from Anchorage to
13 go to a meeting. But this is good. Dr. Kendall, you did
14 great. This is the best I ever been to. I have been to
15 MMS meetings, BOEMRE meetings many, many times, but this
16 is the best. It's good to hear you people, you know, your
17 guys' comments, the comments of our young people.

18 ASRC and Doyon are going to partner and start to
19 do some activity in the Interior so we need to get our
20 people prepared. We've got Ilisagvik College in Barrow,
21 our only tribal college that could train our people to do
22 any kind of development and stuff like that. We need to
23 let our young people know the doors are open and the
24 future for development in the Interior is coming to
25 reality. The roads from the Interior to Nome, Alaska and

1 wherever are beginning to happen.
2 But us in the Arctic in the coastline, we are
3 worried about our wildlife, our garden we love the most.
4 We don't want nothing to happen to the garden we love the
5 most. I look at it on this EIS, where is the next airport
6 that can transport a jet. The only jet we could land is
7 Kotzebue and Barrow and Red Dog. We don't have anything
8 like that.

9 But North Slope Borough has been training all
10 these young people to do the oil spill response training,
11 you know. They got hazardous -- whatever they call it,
12 that class they have to take. We are preparing our young
13 people to do that. We are preparing our young people to
14 go to Ilisagvik College and to get training because when
15 they first start coming around, we weren't ready. We were
16 not ready. They were moving too fast. So we had to call
17 time out, time out where we could be able to sit at a
18 table with BOEMRE or Shell Oil or ConocoPhillips to talk
19 about our future, our way of life, and how they could work
20 together.

21 And I thank you. You did a good job, Kendall,
22 and I mentioned to you when I meet with you a couple weeks
23 ago -- was it two weeks ago.

24 DR. JIM KENDALL: I think so.

25 MR. EARL KINGIK: KOTZ is available, you

1 know. It's the best -- that's the best communication
2 right there. Where is Mike Haller? Where did he go?
3 Communication guy. It would be great, you know. People
4 like to hear that stuff, you know, because we are getting
5 close again. I'm traveling to all the villages so I can
6 understand how this comment period is and how I can talk
7 people into sending in their comments. We tried using the
8 e-mail, and it didn't work out too good. So I got to
9 understand how is the best way to do comments.

10 I hear from you guys, and I could -- I could
11 pass on to the word to the other villages. And I thank
12 you guys again.

13 DR. JIM KENDALL: Thank you, Earl. And
14 that's interesting you said about working with the radio
15 stations. I just had one of my waking dreams. In our
16 meetings earlier today we were discussing about the
17 science that we do that sometimes doesn't get out. So
18 maybe it might be good if John and Michael sit with -- and
19 you are from the -- your first name?

20 MS. SUSAN BUCKNELL: Susan.

21 DR. JIM KENDALL: Susan. Maybe one of our
22 science projects gets completed, one of our people could
23 be interviewed to say what we have learned about the
24 whales, what we learned about the currents because that
25 information is not getting out. And I think you hit on

1 something there, Earl. You said something that triggered
2 this.

3 So let's go back around. I mean, we've still
4 got -- we've still got some time. Walter, anything more
5 to say? Please.

6 MR. WALTER SAMPSON: Yep. The perspective
7 that I'm hearing from all the views is certainly something
8 that is good for all of us. But for the record, 15 to 18
9 years down the road when a platform form comes up, this
10 old fart is going to go down and visit the platform.
11 Thank you.

12 MR. ANDY BAKER: Pass.

13 MS. LISA PEKICH: Pass.

14 DR. JIM KENDALL: You're passing for the
15 third time?

16 MS. LISA PEKICH: I will agree this is a
17 good meeting, and I really do want to thank you for being
18 here and thank everybody else for speaking up because I do
19 think it's a good meeting and good input. So that's all.

20 MR. TOM FIELDS: Pass.

21 MS. SUSAN BUCKNELL: I'm Susan Bucknell
22 and I work for KOTZ Radio. And so I guess I should try
23 and ask the questions that the listeners that aren't here
24 might want to know. And I guess my first -- my easy one
25 is: Can you tell us about this map and the green zones

1 and the little red squares inside the green zones?

2 MR. WALTER SAMPSON: Can you maybe do that
3 with your person on the side when it gets to the point of
4 review, speak with her and --

5 UNIDENTIFIED SPEAKER: Have her interview
6 you.

7 DR. JIM KENDALL: We will do that before
8 we leave.

9 MS. SUSAN BUCKNELL: Let me try and phrase
10 this question. First I want to thank Mike Haller for
11 bringing the environmental impact document by my office
12 today. Obviously I haven't had time to review it, either.
13 So I'm going to ask a layered question that will reveal my
14 layers of ignorance here. And I'm trying to figure out
15 how to start.

16 But I think I understand like from the
17 ConocoPhillips and Shell meetings, is this true that the
18 colder the water, the more oil will not float on the
19 surface, that it will sink or stay in the water column?

20 DR. JIM KENDALL: It's more viscous, but
21 it still floats. It's more viscous, yes. But
22 unfortunately we don't -- none of our -- I'm a biological
23 oceanographer. I'm not a chemist. But I know it does
24 float. Are you a chemist, by any chance?

25 MR. BRUCE ST. PIERRE: I'm a geologist,

1 but --

2 DR. JIM KENDALL: That's close enough.

3 MR. BRUCE ST. PIERRE: What I can say, it
4 does float. It's lighter than water, so if it was to
5 spill, it would come out of the well. But the issue with
6 cold water is that it congeals more. It gels more. And
7 it holds it in a thicker lens. It does not spread as
8 quickly. Like the Gulf of Mexico, we have warmer water.
9 We get a quicker spread rate of the oil and more
10 evaporation because you have more -- higher temperatures
11 in the atmosphere and the sun. But it generally does stay
12 tighter because of the cold water.

13 MS. SUSAN BUCKNELL: You are saying 100
14 percent of it will float to the surface?

15 MR. BRUCE ST. PIERRE: Oil is lighter than
16 water, so it does come up. And unless you apply a
17 dispersant -- dispersants are designed to entrain oil and
18 put it back in the water column. And they used
19 dispersants also in the Gulf. And that's a method by
20 which molecules gather around the oil molecule and weigh
21 it down, essentially and make it heavier than water.

22 MS. SUSAN BUCKNELL: So there are portions
23 of the oil that will not float?

24 DR. JIM KENDALL: Some of it will
25 dissolve, I think is what you are getting at, that a small

1 part will dissolve.

2 MR. BRUCE ST. PIERRE: There's some, once
3 it comes up, will evaporate. It's higher end fractions.
4 In general, I would make the statement that most oil will
5 come up and it's lighter than water.

6 MS. SUSAN BUCKNELL: Most of it. Okay.
7 And I'm just thinking I've heard people comment about that
8 it is shallow in -- where these leases are, and so some
9 people, that makes them think that that's -- like where
10 the walrus -- the clam beds are that the walrus feeds on
11 and the marine life is in that shallow water, and that's
12 why it's a different --

13 DR. JIM KENDALL: It's in the document.

14 MS. SUSAN BUCKNELL: The fact that it's
15 shallow water raises a different set of problems than you
16 have had in the Gulf of Mexico. Does that make sense?

17 DR. JIM KENDALL: It's in the document. I
18 was conferring with Mike, but that kind of discussion is
19 in the document.

20 MS. SUSAN BUCKNELL: That's why it's a
21 layered question. That's what I'm trying to get around.
22 So when we are looking at this document, how would we know
23 where to look? Would that be in parts of people's
24 comments or would that be in the scientific analysis? How
25 do we go about finding --

1 MS. SHARON WARREN: It's in the document.
2 The final SEIS will put what people have commented on, but
3 this document is our analysis -- analysts and our
4 biologists and oceanographers and everything else
5 preparing this document and analyzing it. It's what our
6 agency has put together of taking the science that is out
7 there and putting it into a document.

8 So there is a section called Description of the
9 Environment. That's in Chapter 3 that explains the
10 environment out there. Again, this supplements the final
11 EIS. So sometimes it will refer you back to the Sale 193
12 final EIS, and if it does, that final EIS is on our
13 website. It was done in 2007, and it is on our website.
14 So you may have to be comparing two documents because
15 there will be a description and it will say go to final
16 EIS that was done, and they will have it there.

17 And then the consequences, it brings in the
18 consequences in Chapter 4 concerning how taking the
19 information from the affected environment and what -- and
20 the spill and how it was -- what the consequences are and
21 those environmental effects.

22 MS. SUSAN BUCKNELL: Thank you very much.
23 That helps. And if someone was having difficulty finding
24 their way through the document or finding what they were
25 trying to find in either of those documents, is there a

1 resource?

2 MS. SHARON WARREN: Uh-huh. You can call
3 our office. The phone number is 334-5200. And you can
4 either ask for Mike Routhier or myself, and we would be
5 happy to find -- find it in the document for you.

6 MS. SUSAN BUCKNELL: Thank you very much.

7 DR. JIM KENDALL: Going around the room.
8 We have still got time and there is still coffee and still
9 goodies. We're not going to leave here until everybody
10 feels they have had an equal time to speak.

11 MS. KARMEN MONIGOLD: When was this
12 published? When was it ready?

13 MS. SHARON WARREN: This document was
14 published May -- it came out to the public May 21 --
15 actually, we sent it out in the mail -- what day did we
16 send it out in the mail?

17 MR. MICHAEL ROUTHIER: Around the 21st.

18 MS. SHARON WARREN: Of May.

19 MS. KARMEN MONIGOLD: You sent it to --

20 MS. SHARON WARREN: We have a mailing
21 list, and it went to quite a number of places that we
22 have.

23 DR. JIM KENDALL: Including the
24 communities and on the website.

25 MS. SHARON WARREN: Tribal organizations.

1 We have posted on the website.
2 MR. PATRICK SAVOK: This is digital form?
3 MS. SHARON WARREN: Yes, it's in digital
4 form, as well.
5 MR. PATRICK SAVOK: I'm a digital guy.
6 MS. SHARON WARREN: It's in digital form.
7 What I found out is people will download it off the
8 website, but some people like to use the tool to put
9 little notes on to mark up and everything. You can't do
10 that on the one you download from the website because it's
11 protected. But if you use the disk and you want to use
12 the tools for making little notes or whatever to yourself
13 as you are reviewing it, you can do that with the disk.
14 MR. PATRICK SAVOK: I guess I'll go a step
15 further. If you guys could leave a few extra copies
16 because we can't even download it, it's so big.
17 MS. SHARON WARREN: Scott brought some
18 extras.
19 DR. JIM KENDALL: They are yours.
20 MS. SHARON WARREN: And if anybody needs
21 any more, when we get back to Anchorage, if you find out
22 somebody needs a copy of it, just let us know. We will
23 get it out in the mail as quickly as we can, even if we
24 need to express mail it out to the communities, the
25 fastest way to get it out to folks.

1 MR. BRUCE ST. PIERRE: I had another point
2 based on the question that was asked about walrus. There
3 has been a number of studies done by the federal
4 government, and they have also gone back through kind of
5 their archives and looked at what's been done in the
6 Beaufort and the Chukchi, and a lot of those are
7 categorized in their websites. But in addition, the
8 companies -- at least two of the companies that are
9 looking to go out there, ConocoPhillips and Shell, we have
10 done also studies. I mentioned that in my first comments.
11 And we have a lot of those studies starting to
12 come out starting back in '06, '07, '08. And there is
13 specific information -- if you are interested in walrus,
14 there is work that's been done on walrus movements,
15 migratory patterns, feeding areas, those kind of things,
16 specific to these gray blocks you see on the map. Those
17 are the lease areas. And to a couple of areas that are of
18 interest to the different companies. So there was work
19 done, and those studies are starting to come out. We can
20 provide those. When you come to our community meetings,
21 we like to be able to roll that out.
22 And also in addition to that, the State of
23 Alaska specifically has done a walrus tagging program
24 where they tagged a number of walrus to watch them in
25 their movements. And so there is some information out

1 there, and there is also information about bowheads, some
2 of the ice seals, different offshore birds, the benthic
3 communities, which are the things that live down in the
4 mudline. And you are right, it's pretty shallow.
5 Generally all the way across the Chukchi it's about 140,
6 150 feet in depth. So there is information there about
7 what walrus do, how they follow the ice, areas they like
8 to feed that might help your listeners.
9 MS. SHARON WARREN: And also to that, on
10 our website, we have -- we have an environmental studies
11 program, and so on our website we have the listing of
12 completed studies, ongoing studies, and that people can
13 visit the website and look to see what studies have been
14 done out there, what's ongoing right now because it's
15 continual ongoing studies. And it's also available.
16 DR. JIM KENDALL: Still have time. I
17 don't want to be a nag. Walter?
18 MR. WALTER SAMPSON: I'm done. I said my
19 piece.
20 DR. JIM KENDALL: Earl?
21 MR. EARL KINGIK: Done.
22 DR. JIM KENDALL: Okay. Well, then, on
23 behalf of my BOEMRE colleagues, I would like to thank the
24 community of Kotzebue for letting us host this meeting. I
25 want to thank you for all your comments. These are real

1 important. And you are going to see us more often. My
2 motto is early and often. And we need to come up here
3 because you are part of the process. This is your home,
4 your land, and we want to be part of it. There is others
5 that want to be part of it. But this is your home. And
6 so be it. Anything else?
7 Walter, as ranking government person here, would
8 you like to make one parting comment?
9 MR. WALTER SAMPSON: No.
10 DR. JIM KENDALL: No. Thank you very
11 much.
12 (Proceedings adjourned at 8:51 p.m.)
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REPORTER'S CERTIFICATE

I, MARY A. VAVRIK, RMR, Notary Public in and for
the State of Alaska do hereby certify:

That the foregoing proceedings were taken before
me at the time and place herein set forth; that the
proceedings were reported stenographically by me and later
transcribed under my direction by computer transcription;
that the foregoing is a true record of the proceedings
taken at that time; and that I am not a party to nor have
I any interest in the outcome of the action herein
contained.

IN WITNESS WHEREOF, I have hereunto subscribed
my hand and affixed my seal this ____ day of
_____ 2011.

MARY A. VAVRIK,
Registered Merit Reporter
Notary Public for Alaska

My Commission Expires: November 5, 2012

PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Point Hope, Alaska

Taken June 22, 2011
Commencing at 7:15 p.m.

Volume I - Pages 1 - 110, inclusive

Taken at
City Qalgi Center
Point Hope, Alaska

Reported by:
Mary A. Vavrik, RMR

A-P-P-E-A-R-A-N-C-E-S

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BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: Good evening. Excuse me
for being a little bit late. We were over at the office
speaking with the council, and we had an incredibly good
discussion. We would like that to continue.

My name is Jim Kendall. I am the new Regional
Director for the Alaska office of the Bureau of Ocean
Energy Management, Regulation and Enforcement. And I'd
like to introduce some folks that came with me who are
then going to describe why we're here tonight and why we
are interrupting your week.

First of all, taking notes is Mary Vavrik. Yes.

MS. DORCUS ROCK: First, we need
[inaudible] --

DR. JIM KENDALL: I was going to do that
right after. That's good.

MS. DORCUS ROCK: That's mostly what they
usually do.

DR. JIM KENDALL: Then let's do that
first. Thank you for reminding me. Would you mind giving
us the blessing, please.

(Blessing offered by Dorcus Rock.)

DR. JIM KENDALL: Thank you for reminding
me. Next time I'll remember that we do the blessing
before we introduce people. So thank you very much.

That's the way it should be.

Again, Mary Vavrik will be taking notes tonight
so we have a recording of what everyone says. So please
state your name before you make your comments. Also we
have Mike Haller. Mike Haller is our community liaison.
He helps me understand how to work better with the
communities, and that's what I'm here for tonight. We
also have John Callahan. John, put up your hand. John is
from our Office of Public Affairs. We have Steve
Scordino.

MR. STEVE SCORDINO: I'm right behind you.

DR. JIM KENDALL: He's right behind me.
Steve is an expert on environmental compliance, and he is
here to take comments and understand what people are
concerned with in terms of environmental compliance. And
we have got Scott Blackburn. Scott is a technical editor
and also a technology person that helps work on the
document.

Now, sitting up front are two individuals that
know the document better than anybody else. We have got
Sharon Warren, who is the project manager. She is to make
sure that the document goes from beginning to end. Okay.
And sitting next to her is Michael Routhier. Now,
Routhier, Michael, is the EIS coordinator. He gets all
the parts and pieces together and makes sure all the

1 comments are in the document.

2 Now, because this can be confusing and because
3 we come up here several times a year, sometimes on
4 different topics, we are going to change the way we do
5 business a little bit. The key word is a word we were
6 using just a few minutes ago in the office, and that's
7 communication. And so before we can have good
8 communication, everybody needs to know exactly what we are
9 talking about so we are starting from the same basis. So
10 we are going to take a few minutes early this evening to
11 tell everybody exactly who we are, why we are here, what
12 we need your help on, and what we are going to do with it.
13 And because of that, instead of me going through that, I'm
14 going to give it to the real expert, Sharon Warren. So
15 Sharon, will you take it away, please.

16 MS. SHARON WARREN: Thank you. And thank
17 you for coming this evening. I'm going to be going
18 through these flip charts, and I won't read them to you
19 verbatim because I know that can be done, but many of you
20 may have been here and to our meeting last year, and when
21 we did a draft supplemental EIS for the Sale 193.

22 So why are we here today? We revised that draft
23 supplemental EIS. So we're here today to get your
24 comments. And if you have not seen it, it is a -- this is
25 what it looks like in a hard copy document. We also have

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1 CD disks available if you are -- have it on disk, and we
2 also have it on our website. So there is three ways that
3 you can get a copy of it. If you don't have a copy of it
4 and you want it, please let us know and we will make sure
5 that you get a copy of it.

6 What was Lease Sale 193? It was the Chukchi Sea
7 lease sale. And prior to us doing the lease sale in
8 February of 2008, we did an environmental impact
9 statement. And that is a document similar -- you know,
10 through the National Environmental Policy Act process, and
11 we did a document to assess the environmental impacts
12 concerning holding a lease sale in Chukchi Sea.

13 The sale was held in 2008. And over here I have
14 a map of the area. This was the area that was in the Sale
15 193 area. It's outlined here. And these were the leases
16 that were issued to six of the oil companies. We offered
17 29.3 million acres. So we offered this on a much larger
18 area for lease, and only 2.8 million acres was leased.
19 And these are these little blocks. And after the meeting,
20 you are welcome to come up and take a look at the map
21 and/or we can answer questions from the --

22 MR. JOHN CALLAHAN: There are also maps on
23 the sides there.

24 MS. SHARON WARREN: Okay. So then what
25 happened? So the lease sale was held in February of 2008,

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1 three -- a little over three years ago. Before the lease
2 sale, there was litigation. There was plaintiffs that
3 sued to invalidate the lease sale. And what the -- what
4 they alleged was -- in the litigation was that we didn't
5 do a good enough job on the EIS, on the environmental
6 impact statement that was done prior to the sale. We
7 didn't do a good enough job on it. So they sued us. The
8 sale went ahead because in litigation, you have to ask the
9 Court to stop the sale, and the plaintiffs didn't ask the
10 Court to stop the sale. So the sale happened, and the
11 leases were issued.

12 In July of 2010, the District Court in Alaska,
13 which is in Anchorage, Judge Beistline, he issued a ruling
14 that said, for the most part, the EIS was satisfactory,
15 but you missed three issues. And so the judge said,
16 agency, you go back and you need to redo those three
17 issues in the document.

18 And the three issues that the Court wanted us to
19 address in the EIS, they said that we failed to analyze
20 the environmental impact statement of natural gas
21 development despite industry interest and specific lease
22 incentives for such development. So when we offered for
23 lease these tracts of land, we included in the sale notice
24 an incentive for the companies to produce the gas. And so
25 the Court says, but you didn't analyze the environmental

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1 effects for allowing them to produce the gas. So he said
2 go back and take a look at that.

3 Another thing that the Court said that we failed
4 to do was to determine whether the information identified
5 by the agency was relevant or essential under federal
6 regulations. The plaintiffs submitted in court about a --
7 I think it was like a 45-page document of everywhere the
8 agency analysts had said there was uncertainty, we don't
9 know, things are unknown. Well, when that is done, the
10 regulations -- there is a requirement that when that is
11 done, that the agency has to follow the regulations and
12 determine whether the cost of obtaining the missing
13 information was exorbitant or the means of doing so was
14 unknown. So they said you didn't do that. You made all
15 these statements in here that things were missing, but you
16 didn't follow the regulations when you did that.

17 So we went back. And what we did in response to
18 the court order, we drafted a supplemental environmental
19 impact statement to address the three concerns that was
20 in -- and it was in draft form. That's when we came out
21 here -- and we released it in October of last year, and we
22 came out here in the communities in November to have
23 government-to-government meetings, as well as public
24 hearings. And we came here to Point Hope, as well, to
25 show you what we did of how to address the order.

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1 And we also -- we came out here to get comments,
2 not only from all the communities. We got about 150,000
3 comments on the draft supplemental EIS, and we took a look
4 at those comments. And I'll let Mike explain why the
5 draft supplemental EIS that we did in October was not
6 finalized, because once you do a draft, then you receive
7 comments and then do your -- you do a final supplemental
8 EIS. That's the process. And so Mike will explain why we
9 didn't do a final based on the previous draft.

10 MR. MICHAEL ROUTHIER: Like Sharon said,
11 in the NEPA process you usually come out with a draft
12 document, you go and hold meetings, you get comments and
13 usually produce a final environmental impact statement
14 some short time later. This process was a little bit
15 different. We did the draft. We came out for the
16 meetings. We invited comments. We received over 150,000
17 comments. And something special about those comments was
18 a common theme amongst many of those 150,000 comments.
19 Many of the commenters said, this is great, you looked at
20 the specific issues that the judge told you to look at
21 but, hey, Deepwater Horizon just happened and there is
22 nothing in this document about a very large oil spill.
23 That's what we are really concerned about. This document
24 wouldn't be sufficient without a very large oil spill
25 analysis.

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1 So we as an agency considered those comments,
2 thought about the issue and said, you know what? They are
3 right. This document should have a very large oil spill
4 analysis.

5 So we talked to our geologists and said what
6 would it look like if there was a low probability but a
7 really high impact event in the Chukchi Sea? Can you give
8 us a scenario? And so they did. And we passed that
9 scenario on to our environmentalists. These are our
10 biologists. These are our oceanographers, our air quality
11 experts. They looked at the scenario that our geologists
12 gave them, and they wrote about the types of environmental
13 impacts that could occur if one of those catastrophic
14 events were to actually happen.

15 That's what makes this -- that's the main new
16 analysis in this revised draft EIS. It's similar to the
17 document we came here to talk about in November, except
18 now it has this big analysis of a very large oil spill.

19 The very large oil spill scenario is slightly
20 different than a worst-case discharge. That's the term
21 that gets used a lot at meetings and you might hear in the
22 future. But they are two different terms, and so we just
23 thought we would offer some thoughts about the difference.

24 The very large oil spill scenario that we looked
25 at in this document answers the question of, assuming that

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1 a big blowout and oil spill occurred, what's the biggest
2 worst scenario that could possibly happen. We need to
3 make sure the decisionmaker, the people back in
4 Washington, D.C., understand how serious things could be.
5 So what's the biggest spill that could happen? What's the
6 worst spill that could happen? And it's for the purpose
7 of analysis. This is for the purpose of informing the
8 decisionmaker.

9 So our geologists, like I said before, tried to
10 give us a scenario that was the biggest possible spill
11 that could occur anywhere in the Chukchi Sea planning
12 area.

13 That's different than the worst-case discharge.
14 A worst-case discharge is something that the regulations
15 require wherein there is an actual plan to explore, an
16 actual exploration plan, and it's a specific calculation
17 that entails consideration of the specific location of the
18 proposed well, the specific type of well, the type of
19 technology that that company would use to drill that well.
20 So it's a slightly different calculation.

21 And we just want to know that the worst-case
22 discharge would probably end up being less than the very
23 large oil spill scenario because, again, it answers a
24 slightly different question; whereas, a very large oil
25 spill scenario answers what's the biggest that could

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1 possibly occur anywhere in the planning area using any
2 techniques.

3 An exploration plan with a worst-case discharge
4 would answer a more specific question: What's the biggest
5 spill that could happen using this technology in this spot
6 at that reservoir? So it's a fine distinction, and we
7 understand that, and we would be willing to talk about
8 that some more if people have questions. But we just
9 wanted to point that out for you.

10 MS. SHARON WARREN: So we're here tonight
11 to get your input on this document. As I said, it's a
12 revised draft supplemental impact statement, environmental
13 impact statement. It has -- it carries forward the
14 information from the previous one. Some of the comments
15 that we received, we made some changes in the document
16 based on those comments, as well as had an analysis on the
17 very large oil spill.

18 It's a supplement. We did a final environmental
19 impact statement prior to the sale that was done in 2007.
20 So you will see references in this document to that other
21 EIS because we did -- we did take that EIS and redo that
22 EIS. We supplemented it. So we added to it. And so
23 there may be references that you see.

24 MR. JACK SCHAEFER: Did you bring any EIS
25 statements?

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1 MS. SHARON WARREN: Yes. We have CDs, and
2 we may have some hard copies with us.

3 MR. JACK SCHAEFER: Can you give them to
4 some of us?

5 MS. SHARON WARREN: Yes, yes. Some of you
6 may have been on the mailing list that we sent out, but if
7 you were not, we have them here available.

8 MS. SHARON WARREN: Do you have the hard
9 copies?

10 MR. MICHAEL HALLER: We have some of them.
11 We will work on that.

12 MS. SHARON WARREN: We will get them out
13 before the end of the hearing. We have hard copies with
14 us and we have disks of that document with us.

15 MR. JACK SCHAEFER: You are talking about
16 that document, so aren't people wanting to look at it
17 while you are talking about it?

18 MS. SHARON WARREN: You want to look --
19 here. Okay.

20 MR. JACK SCHAEFER: Is there somebody that
21 wants to look at it?

22 MS. SHARON WARREN: Here is one here if
23 somebody wants to --

24 DR. JIM KENDALL: Comments are not due for
25 a few weeks yet, so there is time.

1 MS. SHARON WARREN: So that's what we are
2 looking for is to get your comments. The comment period
3 closes July 11th, so you have time to get your comments
4 in. We also are using the website here. You can go to
5 our website to make your comments. We have some handouts
6 on how to do that, how to get to our website and how to
7 make the comments on that website, so we will also have
8 some of those handed out, as well.

9 So again, July 11th we need your comments on the
10 document. And we will take comments tonight, as well, you
11 know, for the record, and then you can still supply
12 comments.

13 And then what happens? Once we receive the
14 comments and the comment period closes on the 11th of
15 July, we are going to take a look at all the substantive
16 comments that we receive, and we're going to take a look
17 at them compared to our document. And we are going to be
18 preparing a final supplemental environmental impact
19 statement.

20 This is a court-driven deadline. On May 19,
21 Judge Beistline gave us a deadline that the Secretary of
22 the Interior needed to make his decision concerning the
23 sale by October 3rd of this year. So in order for him to
24 do that, we have to have the final supplemental EIS
25 completed by the first part of September because there is

1 a 30-day waiting period based on the regulations before he
2 can make his decision.

3 And the decision he's going to -- that he needs
4 to make is whether or not to affirm the sale, whether or
5 not to keep the sale as it was in 2008, to modify it in
6 some way -- not make it larger, but make it smaller -- or
7 he can decide to cancel the leases. Those are decisions
8 that he -- the Court told him that he needed to make by
9 the 3rd of October.

10 So that is why we're here today to take your
11 comments as public testimony and then also by July 11th to
12 have comments on the document.

13 DR. JIM KENDALL: Thank you, Sharon. Now,
14 this is where what I consider to be the fun starts. And
15 it's also the most important. Now, first of all, if we
16 need a translator, we have got Dorcus there sitting who
17 gave the blessing. If we have translation issues, Dorcus
18 has agreed to help us out to make sure every comment is
19 considered.

20 Now, a couple of things here just they have
21 already said, but I'm going to remind you. No decisions
22 have been made yet. The Secretary of the Interior has to
23 make those decisions. What we have to do is make sure
24 that we have a good document and all the concerns and
25 issues of the communities put together and taken to the

1 Secretary so he can make the best decision. That's why we
2 need your help.

3 And we were talking in the office just a little
4 while ago with Caroline, and it's all about communication.
5 And I'm a big believer in that. And that was the whole
6 subject of our meeting. And sometimes I get accused of
7 being a frustrated teacher because I like to call on
8 folks, but I'm not quite that bad.

9 But what we came up with in our last meeting --
10 and Earl was helping and Earl was helping a few minutes
11 ago to get organized -- is we need people to come closer.
12 And I would like to get as many chairs up here as we can
13 and sort of form a semi-circle so we make sure everybody
14 has a chance to speak. We will go from person to person
15 and you can have a comment, you can pass, and then we are
16 going to do it again. And we will stay here as long as we
17 need to so everybody feels they have had a chance to speak
18 and maybe several times to speak because one of your
19 friends or neighbors may say something that reminds you, I
20 need to mention this.

21 So we want to make sure when we end tonight
22 everybody feels they have got their views on the table and
23 that everybody has heard everybody's views. And so this
24 is where I would like some help. We are going to move the
25 chairs up here so everybody can move closer, and then we

1 are going to start with the community Elders and elected
2 officials. So Caroline and Earl, I may need your help to
3 help identify who should speak in those two groups, and
4 then we will open it up to everybody. So I'm asking that
5 you all come up here and move closer. And that's where
6 I'm the teacher that says please don't sit in the back of
7 the room because I can't hear you or see you. So please,
8 can we come up here and move chairs.

9 (Off the record.)

10 MR. EARL KINGIK: It's time for you guys
11 to talk about a very important issue. I can start off
12 with the organization I work with. I work for Alaska
13 Wilderness League. I have been fighting this issue for a
14 long time. It's important that the government gets to
15 listen to you guys. We have got a recording secretary.
16 We have got a translator. So this will give you the idea
17 of what this issue is all about.

18 A great honor is being in front of us, our
19 President, Caroline Cannon. And it's another great honor
20 to speak in front of ASRC Energy Services CEO. And it's a
21 great honor to speak in front of the Elders and my fellow
22 Point Hopers.

23 Your voice is needed to reverse this bad Bush
24 Administration lease sale that happened in 2008. Our
25 recommendation is no leases drilling or exploration

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1 activities to occur in the Chukchi Sea. Given the risks,
2 the Obama Administration should not affirm Chukchi Lease
3 Sale 193, nor let any exploratory drilling in the area go
4 forward. There is a lot of other issues, but I'll read
5 the high points.

6 There is no proven technology to clean up an oil
7 spill in the Arctic conditions with cold temperatures, low
8 visibility, broken sea ice and high winds. Little
9 baseline science exists for measuring the effects of an
10 oil spill on the Arctic ecosystem and mammals central to
11 our way of life. We are part of the ecosystem, and we
12 should be proud that Mother Nature has given us to be part
13 of that ecosystem of the world.

14 With the nearest Coast Guard station 1,000 miles
15 away, Arctic communities are not capable of responding to
16 a major oil spill along the Chukchi coast. The Inupiat
17 people have lived off the Arctic Ocean for thousands of
18 years. The Chukchi Sea is a viable source of food for our
19 communities and an oil spill or disturbance of marine
20 mammals and fish could devastate our way of life.

21 Come and testify and let these government people
22 understand how important our way of life is. We have been
23 living here for thousands of years. The garden has
24 provided food for us. Springtime, year-round cycle, we
25 need to continue keeping that up. We need to continue

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1 living our way of life. There is alternative energies
2 that could be developed. There is other ways of making
3 money. We got corporations that could do business with
4 our president of ASRC Energy Service to do development
5 inland and stay away from our ocean, the ocean that
6 provides us with food for thousands of years. Our
7 corporation, ASRC, could be a big help in our way of life.

8 But still we have to watch what we are doing
9 because it's your kids' future. Your kids are the ones
10 that will be affected. It's not going to happen right
11 away. It's going to happen after me and my relatives pass
12 away. And you have to come forward for your children and
13 your grandchildren to continue our way of life in Point
14 Hope Alaska. Thank you.

15 DR. JIM KENDALL: Thank you, Earl. Okay.
16 What I would like to do now is first ask the village
17 Elders if they would like to make some comments. I
18 believe that's appropriate. I don't want to force anybody
19 to make comments, but you are welcome to make some
20 comments, if you would like.

21 UNIDENTIFIED SPEAKER: Why didn't you
22 start with the Elders if you were going to be appropriate?

23 DR. JIM KENDALL: That's what I'm trying
24 to do now, sir. Earl was helping me. He was at the
25 meeting last night, and he's helping me change the tone of

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1 the meeting, the focus of the meeting to get the best
2 information. Thank you, Earl. And right now we will
3 start with the Elders, which we would like to hear first.
4 Thank you.

5 MS. ERMA HUNNICUTT: My name is Erma
6 Hunnicutt. I would write on a piece of paper like -- like
7 Earl if I had -- if I had known that you were coming ahead
8 of time, so --

9 DR. JIM KENDALL: Thank you very much. We
10 will do our best to do better next time. Sir, would you
11 like to comment?

12 MR. LEO KINNEVEVAUK: Whenever I see an
13 oil rig in the newspapers or on TV, it make me flinch, you
14 know, because after what happened with the Exxon oil spill
15 and other oil spill everywhere else, even the
16 environmental impact statement, you know -- I'm sure some
17 people read that. And our people have lived here for
18 thousands of years. We are subsistence users. And I'm
19 also for development, you know, because any kind of
20 development provides jobs for our people. There is no
21 doubt about that.

22 But still, this offshore drilling scares me.
23 Why don't we just open ANWR? You know, there is already a
24 pipeline built. We were afraid when we first heard about
25 Trans-Alaska Pipeline. We have caribou. We have other

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1 animals around. Although we were afraid that we might
2 lose our animals, look at -- look at what happened now.
3 Our animals are still around, the caribou where the
4 pipeline is built. But this offshore drilling is
5 something else, you know.

6 Even that Exxon oil spill after what happened,
7 people are still trying to hunt and fish and then they
8 still find that grease, you know, in their rivers, in the
9 oceans. That's why, I don't know, these oil rigs make me
10 flinch every time I seen one. Thank you.

11 DR. JIM KENDALL: We will come back. If
12 you want to interrupt at any time, please let us know.

13 MR. LEO KINNEVEVAUK: (Speaking in
14 Inupiaq.)

15 DR. JIM KENDALL: Thank you very much.
16 And that was recorded. Thank you, sir. Now, I'd like
17 to -- unless there are anymore -- thank you, Leo. I would
18 then like to -- Dorcus is maybe speaking later, unless you
19 want to try again.

20 MS. DORCUS ROCK: He's right. I know we
21 need jobs here, too, but we also know there is going to be
22 development going on, but that really scares me, too,
23 because we -- that's how we survive with is our Eskimo
24 food, and you all know that for thousands of years. I'm
25 not -- (speaking in Inupiaq.)

1 DR. JIM KENDALL: Thank you, Dorcus. With
2 that I would like to open it up to elected officials.
3 Caroline, would you like to speak first, or would you like
4 to say anything? Is there anyone else you believe should
5 speak first before I open it up to the public?

6 MS. CAROLINE CANNON: There is a lot of
7 Elders here, and I think they need to be heard.

8 DR. JIM KENDALL: Absolutely. I need the
9 Elders, if you will put up your hands, you can speak if
10 you need to right now.

11 MR. GEORGE KINGIK: Thank you very much.
12 My name is George Kingik. I'm an Elder. I'm also of the
13 Unasiqsiigaag clan. What we are talking about is real
14 hard to stomach. In this community, we have been fighting
15 for our ocean since 1945, since Truman started dreaming
16 about the big port over at Cape Thompson. Our Elders and
17 our great-grandfathers have fought to protect the ocean.
18 And that's what we have been doing since they told us,
19 watch out for your ocean. That's your food, your stomach.
20 That's what feeds you.

21 And I oppose the lease sale. I was in Anchorage
22 when they had the lease sale, me and my brother. There
23 was only a few Natives at the lease sale. And a lot of
24 people cry. A lot of people come outside. They look at
25 the company who get the lease. And it was a hurry-up

1 situation two years ago. All those people that was
2 outside protesting against the 193 lease sale because the
3 Elders said no to the big Project Chariot and no to this
4 lease sale. And I still oppose it. Thank you very much.

5 DR. JIM KENDALL: Are there any other
6 Elders that would like to speak? And we will be here as
7 long as we need to, so if you think of something
8 afterwards, you are welcome to jump in. Anyone else? Any
9 Elder? Elected officials?

10 MR. RONALD OVIOK, SR.: (Speaking in
11 Inupiaq.) One thing I'd like to add is what you have is
12 the government controls today, but one drop of oil could
13 become a big problem for our animals. Thank you.

14 DR. JIM KENDALL: Any other elected
15 officials that would like to speak before we go to the
16 list?

17 MR. JACK SCHAEFER: I'm a council member
18 representing Point Hope through our regional federally
19 recognized tribal government known as the Inupiat
20 Community of the Arctic Slope. That tribal government was
21 formed in 1971 in response to Alaska Native Claims
22 Settlement Act and as a region for the Arctic Slope, as a
23 government.

24 And we are a government like any other
25 government. The United States government is a government

1 that has responsibilities, and so do we. There are
2 federally recognized tribes that perform governmental
3 functions. There are -- more than half of all the tribes
4 in the United States have self-governance, have direct
5 funding from the federal government, not through the BIA
6 and regional offices. And so they perform these
7 governmental functions in place of the federal government,
8 whether it be wildlife, EPA, those governmental functions
9 like any other government.

10 And we have that responsibility in performing
11 those functions for our members, and our constitutions
12 reflect that for the well-being of our membership. And so
13 we have this obligation and duty, and there are other
14 tribal governments that have the same thing like the
15 federal government, its responsibility towards its toward
16 its membership and its well-being of the membership.

17 And I guess that's a good start to indicate what
18 our responsibilities are. We are not just blowing hot
19 air. And we do have these functions and responsibilities
20 that we have to address in regards to whatever may be
21 missing or whatever needs to be done, like any other
22 government.

23 Is there any type of revenue sharing? Is
24 there -- how are we going to benefit through something
25 that we haven't addressed yet and haven't been

1 acknowledged in regards to governmental functions?
2 Taxation? Local employment? Tribal employment rights?
3 These functions have to be recognized by the federal
4 government and the State of Alaska. And so it's very
5 difficult for us tribal governments to, you know, respond
6 to things and continuously try to keep track of what all
7 has taken place. But we have been in the court for a very
8 long time, as George Kingik just said.

9 And there have been several cases that involve
10 our governmental functions and our concerns in regards to
11 subsistence that have not been resolved. And so you know,
12 governmental functions are very -- you know, it's a real
13 thing. I guess, you know, this can go on as time goes on.
14 Thank you.

15 DR. JIM KENDALL: Thank you, sir.

16 MS. ERMA HUNNICUTT: (Speaking in
17 Inupiaq.)

18 DR. JIM KENDALL: Thank you. Again,
19 before we go to any of the list I have, any other
20 community Elders or elected officials?

21 MR. MICHAEL HALLER: Could you let Dorcus
22 translate that?

23 MS. DORCUS ROCK: (Translation by Dorcus
24 Rock.) She was saying that when money comes in and so
25 forth, it's good, but it's also that we have to remember

1 to work together when we do that. Like I said, when we
2 get our dividend from the ASRC or from the State Permanent
3 Fund, we all get happy, everybody. And when they catch
4 whale, everybody get happy, too. So if these two work
5 together, we all be happy. Working together that she's
6 mostly concerned about.

7 DR. JIM KENDALL: Okay. I'm going to go
8 to the list, unless there is any other Elders or elected
9 officials that would like to speak. And I'm going to go
10 to the list, and we can always come back. I want to make
11 sure everybody has a chance to speak.

12 Technology. We were talking about that, too.
13 Sometimes technology is not a good thing. All right.
14 George Kingik. I believe he's already spoken. Okay.
15 Down the list here. Jack Schaefer, you were next on the
16 list. Do you want to speak again for a second, or come
17 back to you?

18 MR. JACK SCHAEFER: Sure. Okay. Why not?

19 DR. JIM KENDALL: Okay. And then we are
20 going to make sure everyone gets a chance to speak, but
21 now you are a double dipper. That's all right. We are
22 going to keep going around. Everybody is going to speak
23 tonight.

24 MR. JACK SCHAEFER: As I was saying, you
25 know, there were several court cases that we have been

1 trying to protect our rights to subsistence, our rights to
2 the ownership of the ocean in regards to title. And I
3 will mention these for the record. This is one tribal
4 government that went through this. There were several
5 that had went through this. The Inupiat Community of the
6 Arctic Slope, Native Village of Gambell, Native Village of
7 Akutan, Nome Eskimo Community, Native Village of Eyak.

8 Over the years since the '70s -- and I'll just
9 mention one in regards to subsistence, People versus
10 Gambell versus Clark, Ninth Circuit, 1984. Gambell 1.
11 People versus Gambell versus Hodel, Ninth Circuit Court,
12 1985, Gambell 2. People versus Gambell versus Hodel,
13 Ninth Circuit, 1989, Gambell 3. People of Gambell versus
14 Babbitt, Ninth Circuit, 1993, Gambell 4.

15 This statement more or less came out of a
16 Vermont law school last March in regards to discussions of
17 offshore between the United States and Canada, the Inuit
18 and Greenland trying to talk about oil and gas offshore.
19 And so there was a mention of these court cases that
20 indicated that the subsistence issues have not been
21 resolved.

22 And so that, you know, gives you a little bit of
23 a glimpse that was mentioned to the White House Ocean
24 Policy Group a couple weeks ago, but I don't know if they
25 understood what I was saying because I didn't refer to the

1 Circuit Court here. I just indicated Gambell, 1, 2, 3,
2 and 4, assuming that they understood.

3 The State of Alaska only has jurisdiction for
4 three miles. They might get a little bit of something up
5 to six miles in regards to any type of revenue sharing,
6 and beyond that, zero, nothing.

7 DR. JIM KENDALL: Thank you, sir. Going
8 down the list, I know Earl, you have already spoken. Do
9 you want to hit it again or come back to you? Come back
10 to you? Okay. Thank you. Next on the list. Leo. You
11 were on the list. Do you want to speak again? Or we can
12 come back. Come? Back. Okay. Next on the list -- I see
13 lots of nos. And then I have a whole page where people
14 didn't mark yes or no. Elizabeth S-T-E-O, Steo.
15 Elizabeth? Okay. Caroline, you didn't check yes or no.
16 Would you like to speak?

17 MS. CAROLINE CANNON: I think there is a
18 misunderstanding. That was -- my understanding that was
19 the sign-in sheet. They did not clarify if we are going
20 to speak or -- I think we need to communicate better.

21 DR. JIM KENDALL: Absolutely. We started
22 a little late, and we didn't get the sign-in sheets out.

23 MS. CAROLINE CANNON: We just assumed that
24 was just a sign-in sheet.

25 MR. ROY FILE: Why are you going on that?

1 Is there a different sign-in sheet than this one?
2 DR. JIM KENDALL: We had several to find
3 out who is here. And everyone is going to get a chance to
4 speak. Looking at you, Caroline, would you like to make a
5 comment?
6 MS. CAROLINE CANNON: I'm just
7 observing.
8 DR. JIM KENDALL: You are absolutely
9 correct. Michelle W. Cannon. Michelle. She's not here.
10 UNIDENTIFIED SPEAKER: Mitchell.
11 DR. JIM KENDALL: Okay. I'm sorry. I
12 can't hear too well and I can't see too well, either.
13 Margaret Oktollik.
14 MS. MARGARET OKTOLLIK: No.
15 DR. JIM KENDALL: No? Okay. I'm not
16 sure. I'm going to ask for some help. Sally. Would
17 you -- please.
18 MS. SALLY KILLIGVUK: I say in this world,
19 this land is my land and this land is your land. There is
20 two different things about it. You guys love to eat your
21 food; we love to eat ours. And you guys don't like to let
22 nobody touch your stuff; we don't like to let our things
23 be touched, too. Like they always say, you know, you have
24 to share and give. How are we going to do that if they
25 take that away from us? What are we supposed to do? You

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1 guys don't like to eat our food. Sometimes we don't like
2 to eat your food. And you have to look at it that way
3 sometimes.
4 But you have to remember, this land is our land
5 together, each one of us. We have different colors of
6 this world. We have to hold onto it because we love to
7 eat. I know you guys like to eat, too, even me, even our
8 kids. We don't like to see our kids be hungry. It's
9 going to hurt us, too.
10 It's hurt the peoples down there, too, when they
11 spill that oil. You guys can't see that or understand
12 that part? They are suffering.
13 Like I was saying, this land is my land, this
14 land is your land. Thank you.
15 DR. JIM KENDALL: Thank you very much.
16 Next on the list I've got Mary Jane Attungana. Okay.
17 Bessie Kowunna. Would you like to speak?
18 MS. BESSIE KOWUNNA: Bessie Kowunna, for
19 the record. And I'm not representing any entity, city,
20 Tikigaq or any other. It's just myself as a Point Hope
21 resident. But what I would like to say is I love being
22 Inupiat. I love our food, our culture, our way of life,
23 our circle of life, our land and sea.
24 And I also would like to say that if things in
25 industry should happen, I would rather be involved in it,

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1 not against it or for it, but work with it so our people
2 can see and hear what's going on with industry. We need
3 to make sure what they say they are doing is really what
4 they are doing. With that said, if that should happen, I
5 want to see our people trained, working and be involved so
6 we aren't left out. If not me working, it would be
7 someone else, probably from the Outside. So I'm happy to
8 be working. Thank you.
9 DR. JIM KENDALL: Thank you very much.
10 Next on the list, I see your name again, Ron. Is there
11 anything else you would like to add? No? Okay. We will
12 come back. Dorcus, your name was on the list. You want
13 to make additional comments?
14 MS. DORCUS ROCK: (Shakes head.)
15 DR. JIM KENDALL: No. No. No. No.
16 Okay. Can you help me with this name here? I think there
17 is someone that's written down here as Peter. Okay. I've
18 got a no. Then we are back to the very beginning again.
19 Now, that's the sign-in sheets that sort of got away from
20 us.
21 MR. ROY FILE: You know, I signed a piece
22 of paper right after Bessie did. Can I look at that thing
23 right there? Did you deliberately skip me?
24 DR. JIM KENDALL: It might have been an
25 accident. I apologize. I want everybody to speak. Let's

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1 find out where you are at. Right here. I thought that
2 was Ron. I thought that was Ron over there.
3 MR. ROY FILE: That looks like a Y to
4 me.
5 DR. JIM KENDALL: Well, I saw Ron, Roy.
6 You are very welcome to speak.
7 MR. ROY FILE: I'm at school again, buddy.
8 DR. JIM KENDALL: I'm sorry. I'm a
9 frustrated teacher.
10 MR. ROY FILE: Okay. I just have a couple
11 questions for your personally. Who do you work for?
12 DR. JIM KENDALL: That's a good question.
13 We work for the Department of Interior, Bureau of Ocean
14 Energy Management, Regulation and Enforcement. We are the
15 Feds. We manage the offshore resources and make sure all
16 the rules and regulations and the safety is taken care of.
17 That's our job. And we take the information and pass it
18 to the Secretary.
19 MR. ROY FILE: That's what I wanted to
20 find out. And also, are you -- the way you present
21 yourself here, are you pro development or are you anti
22 development?
23 DR. JIM KENDALL: We are dead center. We
24 are not pro or -- our job is to make sure --
25 MR. ROY FILE: So you do not favor one

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1 side or the other?

2 DR. JIM KENDALL: Personally, I cannot.
3 My job is to provide information to the Secretary of the
4 Interior so he makes the decision.

5 MR. ROY FILE: That's what I wanted to --
6 that's what I wanted to know. Thank you.

7 DR. JIM KENDALL: You are more than
8 welcome. And I apologize for reading it wrong.

9 MR. ROY FILE: That's okay. Just don't
10 let it happen again. We have got to have some fun here.

11 MR. ROY FILE: Yeah.

12 DR. JIM KENDALL: I have gone through the
13 list. Did anybody sign the list that wanted to speak that
14 didn't? Because then we are going to go to phase two.

15 Yes, ma'am.

16 MS. AGGIE FRANKSON-HENRY: Good evening.
17 I wrote my name on the list, and I said yes. This is
18 Aggie Frankson-Henry. And this is to J.F. Bennett, Chief
19 Branch of Environmental Assessment, Bureau of Ocean Energy
20 Management, Regulation and Enforcement in Herndon,
21 Virginia; cc to Michael Haller, Community Liaison, Alaska
22 Region, Bureau of Ocean Energy Management, Regulation and
23 Enforcement of Anchorage, Alaska. And I wrote this today.

24 As you see here in this map, all the gray spots,
25 those are lease sales that's been sold. Our ocean has

1 been sold. They are colored in red, but you don't see it
2 in red. State of Alaska, the corporations do not have a
3 piece of dime, not even a penny. If this goes through to
4 the vessels, we don't see anything unless it lands on
5 shore. And then the North Slope Borough will tax them.
6 That's for your information.

7 For the record, I am Aggie Frankson-Henry, a
8 tribal secretary and tribal member of the Native Village
9 of Point Hope. I am opposing the Bureau of Ocean Energy
10 Management, Regulation and Enforcement, BOEMRE, decision
11 on the proposed actions for multi-sale EIS for the Chukchi
12 Sea, sales 193, 212 and 221 and Beaufort Sea's lease sales
13 209 and 217. And I support alternative one, Beaufort and
14 Chukchi Sea no lease sale.

15 And I'm opposing the National Pollutant
16 Discharge Elimination (NPDES) permit, a permit to
17 discharge of toxic drilling muds and other harmful
18 pollutants into the water within the decision of the
19 proposed actions for multiple sale EIS for the Chukchi Sea
20 sales 212 and 221 and Beaufort Sea lease sale 209 and 217.

21 As a representative for the tribe, it's of best
22 interest of restoring courage, stand up for our children's
23 future and their next generation to have the opportunity
24 to utilize our subsistence resources. This time I will
25 stand. This time I will voice for the good in which the

1 Inupiat people of the Arctic Slope is currently blessed to
2 harvest bountifully from the land, air, rivers and oceans.

3 I am an Inupiat mother, wife, daughter, aunt,
4 tribal member of the Native Village of Point Hope, and
5 most of all a whaler and harvester dependent on the
6 Chukchi Sea and Beaufort Sea for means of survival. Being
7 Inupiat is an inherent freedom to hunt, harvest from the
8 vast frozen seas to nurture my family and extended
9 families across Alaska and Lower 48. The Chukchi and
10 Beaufort Seas provide nutritional food supply on my table
11 without any aftertaste of spill debris from oil and gas
12 exploratory drilling.

13 Point Hope, Alaska is surrounded by the Chukchi
14 and Beaufort Seas. I live in the oldest whaling community
15 in North America, and our future generation historically
16 is in jeopardy without a cleaner environment in the Arctic
17 Slope.

18 It is of my best interest to voice my concern to
19 hope for the best to preserve my culture because of
20 climate change this vast ocean is faced with. I pray for
21 a healthier ecosystem balance for bowhead whales,
22 walrus, polar bears, seals, ducks, fishes, birds, crabs,
23 plankton, oysters, clams, seaweed, worms, killer whales,
24 narwhales, right whales, beluga whales, gray whales, and
25 all the mammals of these two great oceans that we, the

1 people of Point Hope, are blessed with.

2 I come from an economic distressed community who
3 relies 70 percent on subsistence resources to maintain a
4 healthy diet. The majority in distress is our children.
5 Our boundary is rich in herbs, berries, plants, naturally
6 grown dietary supplements for a healthy living environment
7 for our people and animals that relies on these natural
8 resources.

9 As we the people realize today, what really
10 matters is the well-being of our children's future and
11 subsistence resources that will be impacted to strive to
12 sustain traditional knowledge, traditional lifestyle,
13 cultural heritage, cultural land use which industry poses
14 a potential damage to our environment in the Arctic Slope.

15 The Inupiat people has political rights, and we
16 must argue that it is misleading to obstruct the
17 settlement given to the Inupiat people by political or
18 personal gain of regret in our backyard of the proposed
19 2012-2017 Outer Continental Shelf oil and gas lease
20 program settled by the companies' permits without even
21 giving the Inupiat the right to vote by the people of the
22 North Slope Borough communities.

23 We have the right to voice, to meet freely for
24 the well-being of the residents of the people in the
25 coastal communities, whether it be by

1 government-to-government consultation meetings, giving
2 your testimonies to the entities that goes into your
3 communities, avails much to the next generation of
4 subsistence users. No voice, no courage, then you will
5 not be heard for your inherited rights. It will cause a
6 big effect in your community, and their royalties will be
7 dispersed to other people not from your community. The
8 royalties will not be given to the rightful stakeholders'
9 interest or financial gain.

10 Community leaders, I encourage you to speak up
11 and stand up for what is only right because time is of the
12 essence of a vast cultural effect for our future
13 generations' responsibility to maintain without probable
14 cause the right of entries on our land and your children's
15 right to be I am Inupiat freely without any restrictions
16 on our own property to subsist on, restoring a loving
17 inheritance given to us by God, our Creator, knowingly
18 that we, as real people, truly respect and rely on the
19 environment for means of survival as Inupiat.

20 Based on current agriculture in Valdez, Alaska,
21 it is not my best interest to harm this great state with
22 offshore oil gas drilling along the Chukchi and Beaufort
23 Seas. I am voicing my right to life, liberty, and
24 equality.

25 EPA should not grant permits for discharge of

1 toxic drilling waste into the Arctic waters from oil and
2 gas exploration activities to protect the fragile Arctic
3 ecosystem and traditional way of life. Global warming or
4 climate change is a significant example of the devastation
5 we have seen in the Lower 48 by current flooding and
6 violent storms and a disaster in the Gulf of Mexico by
7 human error.

8 I believe today that we have to be very stern on
9 how the federal government and industrial servants that is
10 wanting to develop in the brittle oceans that can lead to
11 another disaster to our land, air, rivers, oceans that
12 will affect or decline our subsistence resources that we
13 rely on for means of survival through this harsh season in
14 the years ahead.

15 The Bureau of Ocean Energy Management,
16 Regulation and Enforcement must conduct scientific studies
17 before a lease sale must be proposed for a lease sale. My
18 question is: How can you clean all the oil on ice? How
19 can you make sure that trillions of oil that may be leaked
20 from a well be cleaned and managed in a 40- to
21 90-mile-per-hour gusting wind? As we know as Inupiat of
22 the Arctic, we cannot even think of surfing the oceans
23 because our lives would be endangered by the great seas.

24 In closing, stand up for our best interests by
25 keeping the seal oil wood stove burning in our whaling

1 camps without any worry of oil on ice debris during the
2 harvesting of the future generations, migratory land
3 animals and marine mammals. Our land, our air, our
4 rivers, our oceans, our resources living on the land,
5 rivers, and oceans do not have a voice for means of
6 survival God gave us to be nurtured by.

7 I oppose the Chukchi Sea and Beaufort Sea
8 planning areas oil and gas lease sale 209, 212, 217 and
9 221. I support alternative one, Beaufort and Chukchi Sea
10 no lease sale.

11 Thank you. I'm Aggie Frankson-Henry.

12 DR. JIM KENDALL: Thank you. Thank you.
13 Thank you very much. Next on the list I've got Leah
14 Frankson. She came late. Is that you hiding back there?

15 MS. LEAH FRANKSON: I didn't prepare
16 anything. I just want to say that I'm against all
17 offshore drilling, no matter what profit for who.
18 Devastation to the ecosystem, devastation to the -- all
19 animals and fish and mammals, devastation to environment,
20 ultimately devastation to Inupiat human is to become a
21 crime against humanity. And there is no money that can
22 fix that, take that away, or change that once that
23 happens.

24 DR. JIM KENDALL: Thank you very much. I
25 have another name here. I believe it's -- I'm sorry. I

1 don't read well. Peggy Frankson. Is Peggy here?

2 MS. PEGGY FRANKSON: Last early Monday
3 morning, my ten-year-old son caught his first seal. He
4 dreams about hunting ever since he was a little boy.
5 That's his passion. He goes out whenever he can, hunting
6 mammals, fishing, hunting for caribou, and he wants to
7 continue to do this. We all want our young people to
8 continue hunting all the animals that we are used to
9 surviving on.

10 We live a subsistence lifestyle. If any of you
11 go into our Native store here and try to buy groceries for
12 a week for a family of seven, you would be -- or try
13 buying groceries for a month. It's over \$2,000, easily.
14 It's outrageous. We have to survive on our subsistence
15 foods we catch. It's part of our lifestyle. It's part of
16 our lives. It's part of who we are.

17 And we certainly are going to keep opposing the
18 offshore drilling sales, the leases, everything, because
19 if our animals are endangered by possible oil spills, you
20 have no guarantee to us saying that no oil will land in
21 our oceans, no oil will wash up on our shores. There is
22 no guarantee. Until there is a guarantee, we are not
23 going to approve of any sales. We are going to continue
24 to oppose them.

25 We want to keep hunting our animals. We want to

1 keep living our subsistence lifestyle. My son wants to
2 grow to a man into a father and teach his kids how to hunt
3 and to live the Inupiat way. Thank you.

4 DR. JIM KENDALL: Thank you very much.
5 Now, according to the list, which is not perfect, I've hit
6 everyone who either didn't mark yes or no or marked yes.
7 So now we are going to open it up to the floor because I
8 want to make sure everybody has an opportunity to speak.
9 So first I'm going to ask for volunteers. And then if we
10 don't -- when we are out of volunteers, I'm going to go to
11 each individual person to ask you again if you would like
12 the opportunity to speak and tell us what you think. I
13 want everybody to have that option.

14 So does anyone want to raise their hand and make
15 a comment before I start going to everybody individually?
16 Just to make sure we are not missing something, because we
17 need your help.

18 MS. LILLIAN A. LANE: I'd like to sign in,
19 if I could.

20 I, too, like my uma, wasn't prepared to -- and
21 have comments, but I jotted a few things. My name is
22 Lillian A. Lane. I'm a resident of Point Hope, born and
23 raised. Love to eat everything my father, my brothers, my
24 neighbors have caught and put on my table. Therefore, I
25 oppose any gas, oil leases out in the ocean seas. Just

1 like everybody here, they are dependent on the -- majority
2 of our food come from the ocean, majority of it that we
3 take in and preserve and keep all year. So the cycle goes
4 on and on and on.

5 We have said this over and over in each
6 testimony that we have spoken through, whether it be from
7 the oil companies or others. We have repeated ourself
8 over and over and over. I'm glad you are here to listen
9 to our testimonies, and I hope that the people that are
10 the deciding body will make -- take these testimonies to
11 heart because this is real. Those people down there don't
12 know what's going on up here. You don't know what goes on
13 up here. I'm glad you are here to listen to our people,
14 the real people who have to live in this community year
15 long.

16 How would you feel if I put a limit to your
17 chicken and cow? That would be my first question to all
18 of you that are dependent on those, too, or your
19 vegetables. The people that are wanting to go out there
20 and drill in our oceans make promises that they would do
21 their utmost, their best to try not to do an oil spill.
22 It's kind of hard to believe because these things that
23 have gone on in Alaska and the Gulf that are -- that did
24 happen, like someone mentioned earlier. You can hear
25 these things.

1 We are going to be repetitive on some of the
2 things that they said because they are important. Our
3 ocean that's out there is unpredictable. We have our
4 sagvaq, the current that is very strong, and it comes from
5 every direction out there. Supposing something happened?
6 How are they going to contain their spills? Those are the
7 things that we want to hear. What are you going to do to
8 do your -- your best to convince us that there is not
9 going to be an oil spill? Those are the things I want to
10 hear, but in a deep -- at the very -- at the -- but
11 overall, I know that since she mentioned -- Aggie
12 mentioned that we won't even get a penny out of it, not a
13 penny. Go -- go earn your dime someplace else, not in our
14 ocean.

15 A lot of times -- another lady said it doesn't
16 matter about the money. Money doesn't matter. The food
17 is more important than money right now. As we speak, it
18 is more than money because if we try and buy stuff, it's
19 really spendy. But I want to also add that the unseen is
20 a mystery to all of us. That mystery is our ocean. We
21 only take what it gives us. We only take what it gives
22 us. The animals give themselves to us to provide for us.
23 So we take as much as it gives us. If anything should
24 happen, we won't have anything. I'm afraid of that. We
25 won't have anything.

1 There was a news thing that the oil companies,
2 once they close their pots, they are not responsible for
3 anything else after. They are not accountable for their
4 closed pots. Supposing something happens? I think they
5 should be responsible as long as they had touched that pot
6 from the beginning to the very end and after. That was on
7 the news the other day. I don't like that. That's not
8 good practice with any oil company.

9 I know that it should -- maybe it might provide
10 some jobs for the community members, some community
11 members, but majority of the workers that do work in
12 Alaska on the pipeline, Red Dog Mine, comes from Lower 48.
13 Our people are not trained enough. Our people are not
14 trained to do these jobs they do on the oil rigs.

15 And we all know about nature. Nature controls
16 itself. The ocean is unpredictable and, if anything
17 should happen, I don't think the oil rigs would be able to
18 withstand anything out there. So therefore, it's a -- you
19 are playing with not only their lives, but our lives,
20 also.

21 Although their technology is updated and they
22 say they have up-to-par equipment, I still don't believe
23 they are good enough to withstand our Arctic conditions.

24 I, too, love to eat my mikigaq, which our
25 Heavenly Father, our God, has provided, has created and

1 put on this earth for our use, our bodily use. And it
2 says if we disturb the land, it's going to disrupt the
3 cycle. I see disruption. I see disruption if they do go
4 out there. And I hope and heartily hope the committee
5 will really consider and take to heart, once again, to
6 really think this through and not think of it's going to
7 bring us a lot of money because it's a federal thing.
8 This is going to bring us a lot of money, which it does.
9 Right now today our money really isn't there at all.

10 Thank you for this opportunity for me to speak
11 during this time, and I thank all the people that stood up
12 and speak on behalf of Point Hope. And I'd like to -- I'd
13 like to say that if they are going to drill out there,
14 they need to think of all the factors that would be
15 affected before they do any drilling. Taikuu. Thank you.

16 DR. JIM KENDALL: Thank you very much.
17 Now, what I would like to do is I'm going to start with
18 this end of the room and go around and touch base with
19 everybody to make sure everybody feels comfortable and had
20 an opportunity. Sir, would you like to say anything?
21 Your name, please.

22 MS. RICHARD CANNON, SR.: My name is
23 Richard Cannon, Senior. Before I say one word, I'm going
24 to pray and ask God to give me the right words to say.

25 Heavenly Father, creator of all things, I ask

1 you to use my voice. Help me say what you want me to say,
2 Lord Jesus. I come before you as your humble servant. I
3 serve you and you only, Lord Jesus Christ. I thank you
4 for this opportunity to speak before these people.
5 [indiscernible] voice your opinion, not my opinion. In
6 Jesus' name I pray. Amen.

7 Again, my name is Richard Cannon, Sr. Most of
8 you people know me here. And I do like to pretty much
9 whale. I have been around a long time, and kind of
10 heartbroken to see that these people are here. I know
11 they're here to just basically do their job. I'm glad Roy
12 asked this gentleman whether he's for it or against.
13 They're taking this thing to Secretary Salazar, that he
14 can't be -- he has to be biased. How can he be biased in
15 a community of people that he know that if there is
16 drilling that is going to harm the environment because,
17 like some people say, there is nothing, there is nothing
18 to clean up the oil spill in the ice. We all know that.

19 And I know your scientists, to me, they are
20 liars. And how could they tell the truth when they work
21 for you guys, when they work for the oil companies?
22 Explain to me how someone is going to say, oh, no, this
23 can't happen. You will be fired on the spot. And I'm
24 quite sure he signs a gag order saying that he cannot
25 talk, that he cannot tell the truth. So just like Aggie

1 say, they are paleface. They are liars.

2 So we as a whole must come against this, and we
3 must come against this now because we know the oil
4 companies, they have money and pretty much have
5 politicians in their pockets. I know these people might
6 say how do I know that. I don't know that, but I'm
7 assuming that's it because they are in Washington as we
8 speak right now trying to push for offshore oil, which we
9 don't get a dime. Alaska will not -- as Jeff says, Alaska
10 will not get a dime from this. So what's the use? What's
11 wrong with our politicians? That don't sound right to me
12 that they don't -- that they will say, go ahead.

13 Now, I didn't say go ahead to me. Are they
14 going to pay off? Maybe it might begin to pay off. I'll
15 just leave it at that. My name is Richard Cannon, Senior.
16 And I'm pretty much against offshore drilling, any kind of
17 drilling.

18 DR. JIM KENDALL: Thank you very much.
19 Ma'am, another opportunity? Jack?

20 MR. JACK SCHAEFER: Sure. I always have a
21 lot of things to say. And I hope you continue to come
22 around and come around. I have been at this for a long
23 time, also, you know. I -- I have been President of the
24 Native Village back in '93 or so, years, and we have been
25 talking about oil and gas for a long time. I sat around

1 my cousins and my uncles when they were talking about
2 their fears and their concerns about offshore oil and gas
3 back in the '70s and what they were concerned about and
4 how they were talking about governmental functions and
5 government-to-government and human rights and -- and
6 responsibilities.

7 And it even got to the point that the ownership
8 of the ocean was never really addressed. And when it was,
9 it was addressed in a controversial way. And so, you
10 know, I still feel that we own this ocean. Alaska Native
11 Claims Settlement Act was for Alaska. And where is the
12 boundary of Alaska? And that was talked about and decided
13 on but never revealed.

14 And then, you know, I feel really betrayed, in a
15 way, because we had so much faith in the judicial system.
16 And we fought for what we thought was right. And we won
17 several times. Uncles and cousins laugh about it. I was
18 young when this was going on. I didn't really understand
19 what was happening, but I understood that we had a
20 responsibility and that we had ownership and that
21 controversy is all over.

22 We even went to the United Nations back in 1989
23 concerned about Prudhoe Bay and the cleanup that was
24 promised by the oil companies so that migration of the
25 caribou and other animals could continue over there. But

1 I don't know if that was done. There was a government
2 accountability report, a GAO report that was published in
3 2002, No. 357 on the restoration of Prudhoe Bay. And
4 companies ignored, companies changed their name, companies
5 filed for bankruptcy, companies walked away.

6 The State of Alaska got furious and said, this
7 is not true. I don't believe your report.

8 And so that's one thing that we keep trying that
9 we have been saying over time is that we are promised that
10 restoration will be done and they will clean it up, that
11 the animals will be able to go through there again.
12 Nuiqsut has to purchase three, four, five times as much
13 fuel to go after caribou now from years back.

14 And this restoration hasn't really been done,
15 apparently. I did see something on the news that there
16 was some work that was being done, but I don't know to
17 what extent. You know, promises have to be kept. You
18 have to do what you need to do. And if you are going to
19 say you are going to do something, then you better do it.
20 And if you walk away, then how can we trust these
21 companies that are saying that they can do it in an
22 environmentally safe way? We are only talking about
23 exploration and leases. I don't know to what extent that
24 we go in regards to impacts and at what stage.

25 There was discussion whether it's going to be

1 tanked or in a pipeline. Both ways involve bladders that
2 are going to be on the ocean floor filled with fuel, six
3 or more sitting there filled with oil. And there will be
4 a pipe that will run up to the surface, two tankers from
5 each bladder or a pipe running to a pipeline that will run
6 on the floor of the ocean to another pipeline.

7 And there has been over 20 years of photography
8 of the ocean floor, and it has been mapped on how that ice
9 moves and scrapes the bottom of the ocean and they have
10 been doing this for years, arctic research, photographs in
11 that area over there, sale 193. So, you know, I don't
12 know to what extent we talk about, you know, things and
13 whether we should be concerned 15 years from now if it
14 will be developed.

15 In a previous hearing, there was a former
16 employee that was on one of those rigs, and he said that
17 he had -- was afraid for his life at one time because of a
18 storm, and that two cables had broken. And he was
19 thankful that that rig did not collapse or sink or
20 anything. They were spared. And he said no more.
21 Whether he broke his confidentiality agreement that he may
22 have signed with the company or -- I don't know. I can't
23 speak for him. But that was stated in a previous hearing.
24 That has not been put on the website.

25 We talk about transparency, openness. We will

1 give you all the information you need. But we haven't
2 seen the transcripts of the hearings. We haven't seen
3 what the other villages have said. What I mean by "we,"
4 is that anybody that could pick up a laptop like that
5 person over there and Googlize and look for hearings. And
6 what they will see is that there are absolutely no
7 hearings for Point Hope from Point Hope on record in your
8 website.

9 The first one appears in 1986 or '83, which was
10 done by teleconference. There were hearings that I
11 testified as the President of Native Village of Point Hope
12 in 1995 reflecting on the international code that we had
13 passed. That's not on record. That hearing took place in
14 Anchorage at the Egan Center in 1995. And that's not on
15 the website. There are other hearings that are there, but
16 nothing from Point Hope. And it's very, very odd.

17 And then these recent ones that were in February
18 are not on the website. Is there a reason why they are
19 not there?

20 DR. JIM KENDALL: Thank you. I'll look
21 into that. Sir, would you like an opportunity?

22 MR. ELIJAH ROCK, SR: My name is Elijah
23 Rock, Senior. I'm a whaling captain in Point Hope. And
24 also Commissioner for Point Hope for nine years. Just
25 talking to the government, federal government over in

1 Washington, D.C. to make them understand that I'm Inupiat
2 and I have a lifestyle that was passed on to me and my
3 ancestors. And I would like this lifestyle continue
4 without any interruption of any development of gas and
5 oil, if possible. If it can't be safe, just don't do it
6 just like that because I like to have gas and oil from the
7 modern-day equipment I use to hunt with and heat my house.
8 I can't go back to my seal oil blubber stove to heat my
9 house, heat it all night like I'm used to today and I
10 cannot just go to the wall and turn my light off and on if
11 we have no gas and oil.

12 But that is something that needs to be really
13 considered from the federal government because the federal
14 government is our government, as far as I understand.
15 Then we have another government, it's the North Slope
16 Borough. That's our government. Then we have another one
17 that's the State government. And that's another
18 government. And we have a Native village government here
19 and we have a City government here in Point Hope, and you
20 know, governments are governments and governments and
21 governments. But still, we are still here. We are still
22 alive. We continue to live because of the fact that we
23 were passed on, taught how to live the lifestyle that we
24 are immune to nowadays. Even though a lot of the things
25 on our past went this way and that way, modernized, but

1 still, you know, the federal government -- someone
2 mentioned that we have water out there, our sea, our
3 ocean. Without the federal government, the State
4 government, from the shore out to three miles, the State
5 government owns that, rules anything in that area. And
6 then from three miles on, it's the federal government
7 waters. But we still hunt in them. We still all live off
8 that ocean, even though the federal and State in them,
9 even though the federal and State government controls it.
10 We abide by their -- whatever they say. We use it. They
11 make the laws and they will continue to make these kind of
12 laws, I don't know, till kingdom come, I guess.

13 Anyway, I support everyone that is against oil
14 and gas development, but it's got to be safe, and somehow
15 we got to make an arrangement for the federal and the
16 State government to, you know -- without money we cannot
17 go buy the modern-day equipment that we use, the
18 modern-day food that we use. We cannot survive just on
19 muktuk seal and -- anymore. We have got to have
20 hamburger. Our children are already used to that.

21 So if something can be arranged where we have
22 enough supply from the State and federal government to
23 keep us alive, if they -- if they happen to do something
24 wrong in our ocean and we can't utilize our Native food
25 anymore from the ocean.

1 But everything migrates, as far as I understand.
2 All the animals in the ocean, even their food migrates.
3 Migrate meaning that, you know, they travel from the
4 low -- lower oceans up -- go up through our area and then
5 continue on over to Canada and Greenland because of the
6 currents. They follow the current. I've never seen --
7 and also I've always heard from my Elders when we are out
8 hunting we -- we can't see any animals when the current is
9 from the west, only seals and polar bear. That's all.
10 But every once in a while when the whales are migrating --
11 this statement is not true either because some the whales
12 always come back because they can't continue on, no water.
13 They'll come back. I caught one of those kind in my
14 whaling years in Point Hope.

15 And another thing I have a problem with is
16 our -- we deem that it's our ocean, but State and federal
17 own that ocean, and they right now they are opening it up
18 to tourist ships going through all the way around up north
19 across Canada, Greenland, everywhere. And that's
20 something that, you know, we have seen and read about in
21 the Lower 48. A lot of animals get hit by the props. And
22 also there is a lot of fishing going on. They make a
23 line, International Date Line for the other countries not
24 to come in, but they still come in and go over that
25 because there is nobody out there really leasing the area.

1 And so when those nets are out there, any kind
2 of animal will get caught in those nets and die, can't
3 swim no more.

4 Anyway, thank you.

5 DR. JIM KENDALL: Thank you very much.
6 Sir, another opportunity, sir? Would you like to make
7 another comment?

8 UNIDENTIFIED SPEAKER: I pass.

9 DR. JIM KENDALL: Ma'am, you are welcome
10 to.

11 MS. LEAH FRANKSON: My name is Leah
12 Frankson. When I first heard about the leasing, the sale,
13 and I made a comment on my Facebook about how people don't
14 understand how the effects would be because it's not them,
15 you know. It's not them being affected. And I said, you
16 know, how would they feel if -- if they didn't -- if they
17 couldn't eat shrimp no more, if they couldn't eat that.
18 And then sure enough, look what happened to them down
19 there, those shrimp -- shrimpers down there. The
20 shrimpers, they are still being affected by what happened.

21 You know, look at what happened in Valdez. That
22 wasn't even a pipe. That wasn't a -- that was just a
23 boat. 25 years they couldn't be fishing, toxic waters.
24 Those are places that are connected that have
25 infrastructure or relief, you know. There is no

1 infrastructure set up up here, nothing. Thousands of
2 miles out, there is nothing.

3 And even if there was, you would add on to the
4 noise pollution. They track all of the pollution that in
5 this pristine environment that they don't even know what
6 might happen. They don't even know what could happen
7 to -- to the ecosystem.

8 For the federal government to sell it in the
9 first place seems wrong to give some one person, one
10 group, one entity profit, and when it could affect so
11 much, it could devastate so much. And I have to say, to
12 me, to allow that it looks like a crime against humanity.
13 Humans, humans here, my family, is eating from the ocean.
14 My family is eating from the ocean. Everybody up here.

15 And it's not the first time the federal
16 government almost let things happen. I was reading that
17 book on Howard Rock and how they almost got approved to do
18 nuclear bomb to change the land so they could, you know --
19 to test it, to test -- to test up here. Even there was
20 EPA back then, almost allow it. And what would have
21 happened if they did? We wouldn't be here if they did.

22 Together we stand up and they said no. And they
23 are standing up and they are saying no to this, no matter
24 your profits. Thank you.

25 MS. LILY TUZROYLUKE: Lily Tuzroyluke for

1 the record. Your agency, BOEMRE, has been in the news
2 lately for corruptions, for corruptions just as recently
3 as 2010. Not these people that are sitting in front of
4 you, but the department that they work for, their
5 employees were found guilty for taking bribes from oil
6 companies. From oil companies.

7 You stated earlier when this gentleman asked, he
8 asked what is your -- what is your stance on this issue,
9 and you said that you are neutral. You said that you are
10 neutral, that you have to take consideration from both
11 sides.

12 I want to know what assurances happens -- what
13 assurance you can give me or the people here that the same
14 corruptions is not going to be happening again. I know
15 that there is certain steps that you have been taking, but
16 I just wanted to bring that issue up since that is a
17 concern. You are here to talk about the supplemental
18 environmental impact statement, and you spoke to the
19 Native village earlier about grading -- upgrading, and it
20 is my belief that your EIS is flawed. It's extremely
21 flawed.

22 You take a lot of studies. You do a lot of
23 studies on all the various animals. We have -- at our
24 office, we have requested information under Freedom of
25 Information Act. I don't know -- we asked for the

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1 information. The first one is between the oil companies
2 and between BOEMRE, formerly MMS. There is boxes and
3 boxes of animal studies, tons of animal studies saying how
4 the seismic testing, how the exploratory and the
5 explorations, how that would affect the animals.

6 But where I see the gaps -- and this is where
7 the traditional knowledge would come in -- is that you say
8 how insensitive the animals are, how a bowhead can take up
9 to X number of vessels, this volume up to an avalanche --
10 I think it's the decibels equal to a volcano eruption,
11 avalanche, and bowhead can withstand that amount of
12 decibels, but as whalers and the experts here, the men and
13 the women here that do whaling, know that bowhead hearing
14 is very sensitive. It's very sensitive.

15 The other -- the other major flaw that I see,
16 and I'm glad that you have here with you, is you have an
17 editor of the EIS that's -- yes. There he is. You take
18 all of the studies, these animal studies, and you get
19 these scientists to find out how this would impact the
20 animals. Yes, and that is important. But you don't look
21 at how or it will impact the human population and how it
22 will impact the culture.

23 It seems in our previous -- in previous sites,
24 things like Exxon, the Deepwater Horizon and other places
25 around the world, like the major deltas where there has

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1 been oil development, it devastates the people. It
2 devastates the people. That's the truth.

3 And you say that you are here to get the facts,
4 to find the truth, and the truth is that this will
5 devastate us. This will devastate us. So I just want
6 to -- I cannot urge enough that you have to dedicate --
7 you dedicate scientists to look at animals. You need to
8 look at the people that are going to be impacted.

9 That's all. Thank you.

10 DR. JIM KENDALL: All very good comments.
11 Thank you. Ma'am, would you like an opportunity? No?
12 Okay. I'm going to come around the table. I don't want
13 anyone to be forgotten before I continue on. Ma'am, would
14 you like another opportunity?

15 MS. AGGIE FRANKSON-HENRY: I'm Aggie
16 Frankson-Henry. I'm a Tikigagmiu. I'm from Point Hope.
17 As we all know that our ocean provides -- God provides for
18 us. Like my Aunt Anna say, that they are given to us when
19 our fathers, grandfathers, uncles, our relatives go out to
20 harvest a marine mammal, even the fowls of the air, the
21 fish in the ocean, it's bountiful. We are blessed. And
22 knowing that, within this time period, we will be
23 impacted. Be ready.

24 There may be a lot of traffic in the air.
25 That's why we didn't see our caribou migrated this last

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1 year. There was a lot of traffic because of people up
2 north were impacted by a lot of studies through the
3 airway. A lot of helicopters, planes. All that, we are
4 going to be seeing that here. And when they come in, we
5 need to try to get some taxes going so that we can at
6 least get a piece of -- get a dime. If they come here and
7 put their equipment on our land, we need to make sure that
8 we -- we invest from that. It's going to hurt us. We
9 know. We know once -- once they -- because the leases are
10 sold.

11 Those that are marked up there in the map in
12 gray are supposed to be red. BOEMRE, or former MMS, sold
13 those leases to the oil companies, and they are still
14 looking for people -- I mean, companies to buy those other
15 leases. But that's our backyard.

16 We were told when we were children never to mess
17 with the ocean because it's very dangerous, never to even
18 go out there and -- and put your feet in the water because
19 the current can take you away. We have to respect the
20 ocean. I was trained to respect the ocean. And I'm
21 trying to tell my children to respect the ocean so that
22 they, too, will be blessed when they go out to harvest.

23 Mammals, animals, fowl in the air -- we like to
24 eat eider duck. We like to eat kumaqs. We like to eat
25 fish, whales, seals because we are blessed.

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1 We know that the NPRA is not in this map up
2 here, too. How many leases have been sold in the NPRA?
3 Our neighbors up north, they are going to be seeing a big
4 change. They are going to be highly regulated. They are
5 going to be so polluted that they will ask us how. What
6 did we do? What did you say to them to prevent this from
7 happening? We stand up and we said no.

8 And it's so hard to see our culture, our
9 traditional way of life in front of us, knowing it might
10 not be there anymore five to ten years from now because we
11 won't be able to celebrate the whale. But we love to eat
12 the bowhead whale, the beluga whale. We are whalers. And
13 we harvest because we were taught by our fathers, our
14 grandfathers, our mothers, our grandmothers, and our
15 forefathers. We are a rich community. God blessed our
16 land with a lot of berries every season. There may be
17 times when there is a drought.

18 As we see today on the news, the violent storms,
19 the -- the flooding that's going on in the Lower 48, their
20 vegetation, their animals, their land is being taken from
21 disaster through Mother Nature. And now look at us today.
22 That's where all -- you know, we are -- and also in Japan,
23 the big earthquake that happened, and now we are afraid of
24 the radiation that may come into our waters and that we
25 may be affected, too.

1 We hurt for people in the Gulf of Mexico,
2 Louisiana. We hurt for them, too, because they have a
3 mom. They have a dad. They have children. They have
4 grandparents that relied on these resources that put food
5 on the table. But then it hurts. It hurts those
6 families.

7 And what did the government do with offshore
8 that was devastated at the Gulf of Mexico? How long did
9 it take them to act and try to clean up the mess? It's
10 going to be even longer here in the Arctic because it's so
11 sensitive, our ecosystem. And we are sensitive, too,
12 because we rely. We rely on what was given to us, the
13 resources.

14 I know we are modernized. We have a lot of
15 technology, but there is other ways that they can, other
16 ways of -- of trying to provide. We know that our
17 government has to pay China, but we don't -- we are also
18 impacted by that because of the greed. But we love our
19 government, too, because we are Americans.

20 But I'm saying no. I choose no development on
21 the multilease sale Beaufort Sea and Chukchi Sea planning
22 area oil and gas lease sale 209, 212, 217 and 221. I
23 support alternative one, Beaufort and Chukchi Sea no lease
24 sale.

25 And those of you that are here today, you have

1 until July 11th to put in your comments. There is a
2 website that you can go to. I have that in my office if
3 you need help to put it in writing to these -- to BOEMRE
4 to help because we know -- we have -- we have Dish. We
5 have TV, those of you who likes to watch news like I do.
6 We see what's going on.

7 The United States is hurting. Maybe it's
8 because we are almost against Israel. We need to pray for
9 Israel so that we will be blessed, so God will have us in
10 our favor. Today here in the Arctic Slope, that's what we
11 do. Because God has blessed us with these resources in
12 the oceans, in the sea, in the rivers, and in the air.

13 And I hope and pray that the decisionmaker
14 listen to our comments. We know that this was done from
15 the other previous President of the United States, but the
16 President today, Obama, we know that his term is almost
17 over, but he's given us the opportunity to speak with the
18 federal government, with government-to-government
19 consultation, executive order 175131 so that we can have a
20 voice in our community.

21 We are Tikigagmius. We will always say our
22 voice. Thank you.

23 DR. JIM KENDALL: Thank you for your offer
24 to help people with the regs.gov. Thank you very much.
25 That was very helpful. Sir, would you like an

1 opportunity? Back to the Elder table, anyone like to make
2 another comment?

3 MR. LEO KINNEVEVAUK: I wish -- I was
4 wishing that the sea mammals and the animals that would be
5 affected by these offshore drilling activities were here
6 to testify with us, you know. It is meaningful because
7 they provide -- they provide us the food from the ocean.
8 And my question is, who will make the final decision on
9 what's going to happen after all the impact statements are
10 taken care of and the testimonies?

11 DR. JIM KENDALL: The Secretary of the
12 Interior.

13 MR. LEO KINNEVEVAUK: Is it the federal
14 government --

15 DR. JIM KENDALL: Yes.

16 MR. LEO KINNEVEVAUK: -- or the United
17 States Supreme Court or MMS?

18 DR. JIM KENDALL: No. It's the Secretary
19 of the Interior, Ken Salazar. He makes the final
20 decision.

21 MR. LEO KINNEVEVAUK: Ken Salazar?

22 DR. JIM KENDALL: Yes, sir.

23 MS. DORCUS ROCK: I oppose on the lease
24 sale, too, and the reason on that is I was thinking about
25 it. I read this one book about those Indians when the

1 federal government took their land from them and, you
2 know, the good Lord really, he won't take our water from
3 us, God willing.

4 You know, we have food -- we have food shortage
5 a lot of times, and you go in my refrigerator or my
6 freezer, you are not going to find no White Man's food in
7 there. It's all Eskimo food. And that's provided from
8 what people give me or when we go out to hunt. And that's
9 how we live.

10 So you think -- think about you our children and
11 our grandchildren. If you think about that, it's real
12 hard. I heard everybody being against it, so I hope the
13 Secretary of the Interior will think twice about it before
14 they do anything. You know, it's our land, our water, our
15 sea. And I remember that one man that mentioned that
16 hunger knows no law. We are not going to go to that
17 extinct -- we are not going to go that far, but the
18 testimonies of these people, I hope they really listen to
19 what they are saying. It's from the heart. They are
20 saying that from their heart, and that's what I'm doing,
21 too, the same thing.

22 That's the only way we provide our food. I
23 can't go to the store. If I did, I have to spend, 2-,
24 \$300 just to get what I need. And you know, when you buy
25 meat -- did you go to the store to see how much the meats

1 are? They are about \$18 a pound. You think about that.

2 You got to think about all the testimonies of
3 these people. You got to think about it from your heart;
4 not just by looking at them, but from the heart. I really
5 hope that you do listen to us because I know that the good
6 Lord will be with us. And I hope the Secretary of the
7 Interior will think twice before he signs that paper.

8 Money is not really anything, you know, when you
9 think about it. It is a lot of times, but money is not
10 anything compared to our food that we get. The men hunt
11 for it, too. It's not easy for them to be out there
12 hunting. If you ever tried going out to go hunt like they
13 do, I don't think you would last a week, but they -- they
14 dare through that just so we would have food on the table.
15 I just wanted to say that. Thank you.

16 DR. JIM KENDALL: Thank you very much.

17 MR. EARL KINGIK: It's been a long battle
18 since 2008. A lot of things happened between 2008 and
19 now. A lot of meetings, a lot of planning, a lot of
20 development talk. Our corporation, ASRC; our cousins,
21 Olgoonik Corporation, and other corporations are getting
22 involved with oil development without your guys'
23 knowledge.

24 We don't know what's been happening, but we
25 would like to ask the government to do investigation on

1 what's been happening since the Native Village of Point
2 Hope said no to offshore activity. Point Hope is not new
3 to this. It's been years and years and years from my
4 father was alive, my uncle [indiscernible] and all these
5 other people, my mother, all these people that attend
6 these meetings because the government want to go out to
7 the ocean we love the most. And all these years they have
8 been saying no but, still, the government come back again
9 and ask the same thing, could we do some lease sales in
10 that area.

11 And as we had a president by the name of George
12 Bush, the George Bush era has disappeared. George Bush
13 wanted development in the Arctic. George Bush got a big
14 donation from oil companies to become president. So you
15 see, George Bush wanted to do development right away.

16 I thank Native Village of Point Hope for passing
17 a resolution opposing offshore activity in the Chukchi and
18 the Beaufort. A lot of things are happening. This past
19 week they called an Arctic Summit. Any of our people is
20 attending that Arctic Summit? There was another big
21 meeting I got invited to. It was Shell Oil, Shell Oil
22 meeting with Chamber of Commerce talking about the
23 Chukchi, talking about development. And where is our
24 people? A lot of meetings happening since 2008.

25 I would like to be home, but I love you people.

1 I love our way of life, and that's the only way I can keep
2 up with this very hot issue that's in front of our
3 community. After listening tonight, we gave you strong
4 encouragement to even fight harder to let you guys know
5 100 percent that attended this meeting is against offshore
6 activity.

7 The biggest scare is an oil spill. They said
8 there is no danger in shallow water like the Deepwater
9 Horizon. I had a chance to go visit the Deep Horizon
10 [sic] oil spill. I had a chance to witness what I always
11 been talking about if there was an oil spill. I had a
12 chance to feel the crude oil that the birds and the
13 alligators and the fish got into.

14 So you see, we should all oppose offshore
15 activity. It's too precious to give away. We always look
16 forward to see qinu come every fall. We call it our very
17 first ice. But if there is any oil spill, we will see
18 black crude coming like qinu like the fresh ice that goes
19 to Point Hope every fall, and we don't want that to
20 happen.

21 There is no proven science technology to clean
22 oil spill. Let the record know that Point Hope says there
23 is no proven technology. Science can't prove that.

24 Salazar, we have many meetings with him.
25 Echohawk, we have many meetings with them. EPA

1 Washington, D.C., we have many meetings with them. And we
2 have meetings with Senators and Congressmen. We got
3 friends that always happens get votes to fight against the
4 offshore activity in the Arctic.

5 So you see, we are not alone because the tribe
6 is very powerful. We have got a Constitution of the
7 United States, thanks to Jackson [sic]. We foster and
8 protect our way of life. We got to understand that. We
9 got to stick together. Without to sticking together,
10 things will happen. When we stick together, things always
11 happen in a good way.

12 Just remember, Point Hope should say no, no, no
13 to offshore activity. Thank you.

14 DR. JIM KENDALL: Thank you, Earl. I'm
15 not going to forget this side of the room. Ma'am?

16 MS. LILLIAN LANE: Lillian Lane. Call me
17 Anna. As I was sitting here and wondering what else I
18 should say, my mom called me. She just came back from
19 Kotzebue. She's doing well, praise God. She said I had
20 other plans to do something else tonight, and that was
21 church. I love to go to church. And Mom said there was a
22 very important meeting that's going on. You need to go
23 and voice. You need to go voice. You need to go say
24 something.

25 So when she put that on me, I had no choice but

1 to come here and say what my heart says, wants me to say.
2 Like others, my freezers are filled with ducks, muktuk,
3 walrus, oogruk, agvik, seal oil.

4 I don't want to -- I don't want to see seas on
5 account of man-made mistake, technical mistake. I love to
6 eat my mikigaq. I love to eat my meat.

7 I told myself I'm just going to say a few words,
8 and that will be it. But right now, my heart is speaking.
9 Ever since the Man of No Color has set foot on our
10 society, there has been changes. Majority of the time
11 it's bad changes. They have hurt our people, physical,
12 mentally, spiritually. We are tired of being pushed
13 around, being told what to do. Enough is enough.

14 Our brave men who set their -- set themselves
15 out in the ocean to catch what they could catch -- and
16 they have been very successful this year. God has blessed
17 us mightily. Once again, I -- from the bottom of my
18 heart, from the bottom of my heart we plead and we beg
19 that you don't allow to do this to us. They have done
20 enough to us.

21 You folks out there don't know what it's like to
22 live out here. You have to come out here and live it, to
23 understand what we go through.

24 Like my boy, he's out there hunting right now.
25 I encourage him to go hunting. I want my freezers filled

1 as much as I can get. We not only feed ourselves, but for
2 the community. We share. This is a sharing community.
3 We give first and take whatever is left over. And still
4 our freezers are full, whether they be in the ice cellar
5 or the new freezers.

6 I don't know what else I can say more because to
7 beg and plead, I don't usually beg or plead, but this time
8 I am. I am. I don't beg or plead. It's for the good of
9 our people.

10 But thank you for coming again and listening to
11 our comments. And I hope they really take it to heart and
12 understand, truly understand where we are coming from
13 before they make this decision whether to do it or not to
14 do it.

15 Thank you. Lillian Lane.

16 MS. EVA LONG: I know I said no to that
17 paper. I'm Eva Long and I'm against offshore whaling
18 [sic]. Thank you. Offshore drilling. I like whaling.

19 MS. CAROLINE CANNON: First of all, I want
20 to say my name is Caroline Cannon. And tonight I wanted
21 to listen because it's the people that gives us direction
22 as leaders what to say. We carry the message behind our
23 back. And I just want to commend everyone tonight for
24 speaking from your hearts. Many times I carry that
25 luggage.

1 When I leave from here with the plane and I get
2 to Kotzebue, there is times I visualize an oil rig. There
3 is times I visualize black ice. There is times I cry. I
4 ask many times, why me? Why me? There is leaders in the
5 community with many long knowledge, wisdom. A gift that
6 can reach out to the people in English or in Inupiaq.

7 There are many times I miss my children's
8 birthdays, anniversaries, but tonight I am very pleased to
9 hear; tonight I am so blessed because it's the same
10 message.

11 We envision the ocean with the rigs. I have a
12 little reminder from a friend from Valdez, a jar full of
13 their rocks with the oil, the black oil, and they just dug
14 that not too long ago. That is my reminder I keep in my
15 room. We are blessed with three whales this year. We had
16 the opportunity to see many things happening within our --
17 in our -- in front of us. A lot of joy.

18 And yet we know how damaging it can be if there
19 is one drop -- one drop oil -- I mean, oil drop. We know
20 how damaging that can be. That can be forever.

21 I grew up with five brothers, so I never really
22 had a chance to put five gallons into our tank. But one
23 time my brothers weren't home. Mom said I had to go put
24 stove oil in our tank, and I cooveed. I spilled. I
25 cooveed, and I saw that oil go straight to the snow

1 rapidly. And that five gallons was valuable to my
2 parents. That little drop was valuable to our household.
3 And it broke my heart. I couldn't contain it. It spill.
4 It went directly to the ground.

5 So knowing that, at that time I didn't know that
6 that would educate me, somewhat help me to know how
7 crucial or how -- how the materials is as a liquid.

8 So I just want to say that I am so blessed to
9 hear people coming forward. I'm always speaking them out.
10 I'm not trying to put myself up, but when I visit Elders
11 and they bless me, keep on, keep on. And we are facing
12 our own people. Our own people.

13 It's hard, but tonight is a critical meeting.
14 We have schedules which we shared with -- we had a meeting
15 with the group earlier. And we shared that our
16 calendar -- our subsistence way of life evolves on the
17 weather. We can't program and say we are going to catch
18 oogruks in two weeks. We can't program this and say we
19 are going to go with this. We have to do it while it's
20 available, while it's here. A lot of us want to be out
21 there, but I'm glad that we have some people here. Many
22 times have we had meetings, and there is only a handful.

23 And I envision our rich heritage, our culture
24 and the live berries if we don't speak up when it's
25 already too late. But I'm so grateful that we had

1 mentors, the people before us, our Elders, that were vocal
2 that liked to say their piece, our mentors that protected
3 our land, our ocean. They cared. There is many -- and
4 yet at that time they cared, but they weren't -- they
5 weren't given compensation. No meeting fees.

6 A lot of times we have to travel with what
7 little we have in our pocket. If you go to D.C., you
8 can't get anywhere without a cab. There are hotels. You
9 think it's ridiculous here in Alaska; \$200 a night in
10 Anchorage during the summer rate? It's 3-, \$400 over
11 there. What little money you have, if they put you in
12 a -- in a hotel, you're going to see little critters
13 because we can't afford that. We can't afford that
14 lifestyle. But it's critical that we have a voice.

15 I just want to say thank you. Thank you for
16 opening the doors because these doors were shut before.
17 Believe me, they were shut. There are open doors now.
18 There is opportunities for Native tribes to get up and
19 speak and to be recognized. Sometimes you feel like you
20 are walking the trail by yourself when you don't have
21 nothing. But it has to be heard. You have to be heard
22 irregardless.

23 Remember the big issue about those coupons on
24 the beds not too long ago? Many times we have to sleep in
25 a hotel that's not even worth it. Don't want to even get

1 inside the blankets because that's how it looks.
2 Sometimes it's filthy. Who in their right mind would
3 travel for five or six days?

4 There are times you can barely get 300. People
5 think we make money. We don't. We are a tribal
6 government with very little. I know someone had made a
7 comment many times in our meetings that it's just like
8 pennies. But you know what? The reward is so big when
9 you land a whale, the reward is so great when you have
10 that celebration, when you recognize that child that was
11 born this year, when you see an Elder crying from their
12 heart, quuyah. The reward is so great.

13 Many times we speak. We testify over and over
14 and over again. But it's through your prayers that we are
15 able to stand firm. Our mentors and our God (Speaking in
16 Inupiaq), the whaling captains, the umialiks back in the
17 day. But with honor, with respect. And it is because of
18 them we are standing here today.

19 I get curious many times as I travel, why aren't
20 they including the coastal villages such as Savoonga,
21 Gambell, Kivalina? Because it's those three villages,
22 when they see me on the road or when they see me in the
23 airport or wherever, they come and thank me. They don't
24 go to their villages to go get their -- to get their
25 public comments, but they are -- they are being impacted.

1 We need to include them. I don't have -- I don't know
2 their -- their background. I know the walrus is crucial
3 to them, to Savoonga and Diomedea for the covering of the
4 boat. That's all I know. But at one time they used to
5 come here with boats to celebrate with us.

6 There is a lot of issues that were said tonight,
7 a lot of critical ones, but I just want to commend --
8 commend the BOEMRE -- sometimes we say bummer. But thanks
9 for taking this time and giving us the adequate time as
10 you go around a circle. I heard many, many, many
11 heartfelt testimonies coming from your heart because I
12 feel like this is one of the last meetings that's going to
13 occur. We have to exercise our rights as human beings.

14 I don't want my great-grandkids to go to the
15 library and say oh, my amua did this. Did they really do
16 this? No. I want them to have that opportunity to
17 practice what we do today.

18 I just thank you all for saying and coming and
19 saying your piece. I felt it tonight like never before.
20 But I stress that you need to go to the other villages,
21 the villages that I mentioned that are being impacted. I
22 know July is just around the corner, but it's critical
23 that they be heard. Nome needs to be one station, one
24 area. They have whaling communities in that area.

25 Climate change is one thing that we are seeing

1 firsthand (Speaking in Inupiaq). Our weather has changed,
2 the ice condition, you name it. But I don't want to echo
3 what everybody has been saying. There is a lot of good
4 statements. I came here tonight. And we would like to
5 see the reports. We want it on the Internet. We wanted
6 to be able to have access to it because where is Point
7 Hope.

8 And I'm just grateful that there is a whaling
9 captain's wife over here. She said this land is my land.
10 To see her grandkids here, when you have tutichiats, I
11 visit her house and I see her grandkids. Many grandkids.
12 So I was thankful that the Lord blessed them with a whale,
13 the hard work it takes to land a whale to prepare.

14 I'm thankful for the Kinneveauks. I'm thankful
15 for the Lanes, the Killigvuks, that we were able to
16 celebrate the true meaning of being a (Speaking in
17 Inupiaq), and to share with our brothers and sisters
18 hagamktus [Inupiaq ph]. I want to thank my uma Leo for
19 coming home and sharing his knowledge with the songs that
20 he has that we have yet to learn because they are so
21 precious in our hearts. They are so, so -- so much who we
22 are.

23 I said enough, but again, I want to thank
24 everyone for coming. Taikuu.

25 DR. JIM KENDALL: Thank you very, very

1 much. Sir, would you like another opportunity?

2 UNIDENTIFIED SPEAKER: (Shakes head.)

3 DR. JIM KENDALL: Ma'am?

4 MS. MARGARET OKTOLLIK: Hi, I'm Margaret
5 Oktollik, and I'm against offshore drilling, and it is --
6 I haven't been home for many years, and it is good to go
7 home to the whaling tradition, and it is a very -- it
8 describes the whale spread around the whole village,
9 and it's going to hurt when they do the drilling and
10 it's -- I don't know why they choose this place right now
11 because I grew up here in Point Hope. And I -- we live
12 off the shore and the land. And I don't know why it's
13 coming right now.

14 My kids are learning the tradition, too, and
15 it's -- the tradition is the main culture around here in
16 Point Hope. This is the oldest village in Point Hope --
17 in Alaska. We -- it's -- it's -- it's -- this place is
18 critical right now. I mean, I don't know. It's fine to
19 be home and it's good to see everybody sharing, everybody
20 getting along. And the community is still the same, and I
21 hope it stays this way. And I want my kids to see how
22 much it is to love one another and share with one another
23 and care for each and every one. My kids really love
24 being home. I'm against everything. I'm done.

25 DR. JIM KENDALL: Thank you. Ma'am, would

1 you like another comment, please?

2 MS. SALLY KILLIGVUK: My husband is a
3 whaling captain. You know, I was thinking while you guys
4 were all talking about money and having food in the
5 freezer. Every time we have money, we spend it and the
6 next day you have no more money. But you still have the
7 food of -- the Native food that we share through the
8 villages everywhere. All over the Alaska peoples trying
9 the mikigaq and everything. If I was a millionaire, I
10 would have every one of these poor little people go to
11 every meeting you guys have.

12 But, you know, the only thing I'm proud to be,
13 to tell you guys the truth, that I love to be Native
14 American to share our traditional ways. And I will fight
15 for what we are doing right now. And when we teach our
16 kids how to say no when the bad things are -- when we have
17 bad things, we say no.

18 And this -- these things we are trying to say
19 no, which you guys can't hear. And we are trying to tell
20 you guys over and over, no means no. Like we always teach
21 our kids, no, you can't do this. But what's the use? You
22 guys have to open your ears and open your hearts because
23 you know -- but every time we have money we spend it, but
24 we still have the Native foods with us for the rest of our
25 lives. We can't change.

1 And the ocean -- you guys eat, too. Like the
2 fish, like the shrimp, crabs. You guys eat those things,
3 too. It hurts you peoples, too. Not only us, because you
4 guys love to eat those things, too. And I -- you know,
5 common sense that you have to use, too.

6 But I respect each and every one of you guys and
7 the ones that are fighting for us, like Caroline and
8 Oktollik, to fight for us. And we are making them strong
9 to respect them. We pay for them to help us. But they
10 are -- they are doing their best, but we pray for them to
11 be strong for us because we can't do it. And I respect
12 them, for them peoples to doing that for us. And you
13 know, we said no.

14 And thank you.

15 DR. JIM KENDALL: Thank you very much.
16 Would you like to make a comment? You okay? Okay. Thank
17 you. Would you like to make a comment? Okay.

18 Well, it's getting late but, then, again, I want
19 to make sure everybody feels their voice was heard. This
20 is important. So is there anybody else that would like to
21 raise their hand and say something? I mean, I don't want
22 to exclude anyone.

23 MR. JACK SCHAEFER: We heard a lot that
24 was said earlier. There were a lot of points that were
25 made, and really valid points. We need jobs. We need

1 this oil. We don't like being poor. We expect to be
2 respected. Treat us like everyone else. This is not
3 Ecuador. Those people had their oil stolen right from
4 under them. They had to go to the UN. So did we. And
5 the UN combined Ecuador and us together in regards to
6 discrimination against indigenous peoples. Five
7 transnational corporations through their resolution that
8 they passed in 1989 and did their investigation, and we
9 responded.

10 Our issue was Prudhoe Bay at that time. We
11 didn't get a chance to talk about offshore, but we did
12 indicate what our impacts were with that Prudhoe Bay. The
13 impacts on those animals that live up there, the birds
14 that live up there, the migratory life. And we were very
15 thorough about the impacts that had taken place back then.
16 There were 200 holes in that Trans-Alaska Pipeline back
17 then. And the person who blew the whistle was persecuted.
18 And this was testified before.

19 But getting back to jobs, oil, opportunities,
20 business, and they talk about that place up there. I have
21 been working for a village corporation since 1983. I had
22 to be involved with title recovery in regards to those
23 people that had filed for Native allotments as their own
24 from the federal government. They almost did not get any
25 of their allotments on the coast because the federal

1 government said it is valuable for oil and gas. And that
2 is reserved to the United States. And if you have got
3 evidence otherwise, please provide it to us. Naturally,
4 we did, but they made that statement. So there is oil
5 here on shore.

6 In 1980, the Alaska Lands Interest Conservation
7 Lands Act [sic], ANILCA they call it, mandated an
8 inventory of every square inch of Alaska. What minerals
9 are there? What oil is there? Did they let us know? No,
10 they didn't let us know where everything is. They want
11 to -- they wanted us not to know because of this
12 competitive arrangement, competition, intellectual
13 property. But we have oil here. We need to know in order
14 to make a clear decision.

15 Is it really the end of the world when there is
16 more than 50 years of oil in the Lower 48 for the whole
17 country? Tar sands and shale oil. What about Prudhoe
18 Bay, the Shuvlik formation, the shale there, which will
19 last and keep that pipeline alive through 2074 at 660,000
20 barrels a day then.

21 And we got this impression that was hitting us
22 hard in the year 2000 during the Bush Administration's
23 last phases. This is a crisis. We got no oil. What are
24 we going to do? And a couple of Senators and Congressmen
25 stand up and say, hey, wait a minute. There is 62,000,000

1 acres that are leased now. And you are not even touching
2 it? And you want to go offshore over there? You want to
3 go offshore in California? We said no to that. But you
4 still want to do it, and yet you have 62,000,000 acres
5 sitting right there leased, and it's not being developed.

6 What's wrong with this picture? Is there a
7 national security issue? Is there a problem? There is
8 all this controversial propaganda, whatever, that's being
9 pressed upon us without true facts as to exactly what is
10 there. Naturally we brought it up to the oil companies
11 when they come in our doors and we close the door and they
12 sit around and talk and have tea with us, business. And
13 we say, hey, wait a minute, there is oil right there. How
14 come you don't want that? There is nothing there. It's
15 over there, but not here. Which is a finite lie. And why
16 did they lie? Because that oil over there is free. There
17 is no tax.

18 As a matter of fact, there was incentives until
19 Obama said, hey, wait a minute, there is something wrong
20 with this picture. We are paying you guys to take this
21 oil, you know. How are we going to deal with our deficit?

22 So we have all this oil on shore, and these oil
23 companies running around with their temptation, that
24 apple. And they are even picking on our leadership, our
25 business and saying that's the only way to go when we

1 haven't really got a clear picture what we really are --
2 what we really have here.

3 This area is the largest oil patch in the world.
4 We are sitting on a bowl. The edge of the bowl is Point
5 Hope, Wainwright, Point Lay. And it's being sucked from
6 the middle, not from the edge. And we are left with
7 nothing, because it's being stolen from over here from
8 next door way far away. They really should deal with what
9 there is now and what you can deal with now and quit
10 messing around with stuff that we can't deal with. There
11 is no technology to clean up oil in broken ice.

12 Did you see those pictures from the Norway
13 study, from the Canadian MacKenzie study? Those ice were
14 far apart from each other, lots of water, no wind. Great
15 job. We can do it. I looked at satellite photos all year
16 looking at the ice formations. We had a tough year. All
17 the way from Barrow to here, that ice really moved around.
18 There would have been no way to clean up. We just finally
19 lost some of this ice just recently. It's been stuck for
20 a while.

21 Our businesses have opportunities, but they are
22 being abused by oil companies for gold instead of silver,
23 as a figure of speech. The technology is not for the
24 offshore yet, but the technology sure is for onshore. If
25 the federal government has told me this is valuable for

1 oil and gas, then let's deal with it here before we even
2 go offshore. Work on that technology because the
3 technology has not changed through Arctic research,
4 through the National Science Foundation, over the years
5 has not changed at all. They have to be forced into it or
6 something to come out with a way to deal with this.

7 I don't know if you remember the Santa Barbara
8 accident in the '60s, but the depth of that accident is
9 the very same depth as that -- those areas over there, 150
10 feet deep. And when that thing leaked, it tore the
11 ground, and you can't plug a torn ground. And how fast
12 did that oil spread in 150 feet of water versus a mile?
13 It went fast. Did they actually clean it up? Did they
14 plug it? That's what we are faced with here.

15 This is shallow water, and there is talk about
16 weakening and streamlining regulations on shallow water.
17 That was on the news today. That's what they want to do.
18 But it's shallow water. It's like an hourglass. And I
19 don't see how that was missed. But at the same time,
20 there is oil on shore outside of the petroleum reserve.
21 Our businesses should have control over that. That was
22 why they were formed with that relationship with the
23 federal government under this forceful Alaska Native
24 Claims Settlement Act, with that partnership arrangement
25 for the economic opportunity for that corporation and ours

1 to do it in our impacted areas per testimony back then
2 with that expectation. But these oil companies got in the
3 way and attempt offshore.

4 And it really gives you a picture with regards
5 to what Alaska has said, what the governor has said. And
6 what is his background? A lobbyist for oil companies.
7 Even though we get nothing out of it, he say we are going
8 to get jobs. It's a good thing. When that pipeline runs
9 through, it runs through the National Petroleum Reserve.

10 Is it taxable by the North Slope Borough? No.
11 It's federal property. Is it taxable by the tribe? Yes.
12 But has the tribe practiced it? No. Has there been
13 technical assistance to make it happen? No. Has it been
14 through court rulings that ruled in favor of that tribal
15 government? Yes. Has there been technical assistance
16 provided? No. To make it happen as the
17 government-to-government in regards to delegation of
18 authority as a government-to-government.

19 We are equal, almost like clones, whether we
20 like it or not. And we share that responsibility. But
21 there is so much oil that's on shore. BP just purchased
22 property next to the pipeline, 30-some-odd thousand acres.
23 And that oil there is, what, 17,000,000,000 barrels, which
24 will last us until 2074. At 660 [sic] barrels in 2074.

25 And so we keep hearing from personnel from the

1 federal government that we have a national security
2 problem. This is an urgent issue. We need this oil. But
3 at the same time, we are hearing these other things, which
4 nobody really knows about. I mean, I have to beg to
5 Google to get that information and see and talk to other
6 people to see what's going on while we still haven't seen
7 what ANILCA has provided on that mandate of inventory of
8 the land.

9 So there isn't -- we have no oil. It's just
10 that there was interest that was shown. When you look at
11 those technical reports that were done in the '70s, you
12 notice that there is an interesting trend in regards to
13 location. Nome, Kotzebue, Cook Inlet, Aleutians. And who
14 did them? KPMG, an accounting company. Are they
15 trustworthy? What did they focus on? Were their
16 biological studies accurate? And how much did they focus
17 on that?

18 There are over 50 technical reports that were
19 provided by your website that I tried to look through.
20 There were three for the Navarin Basin, maybe one or two
21 for the Nome area, one or two for Kotzebue, about
22 20-some-odd for the Beaufort, maybe six for the Hope
23 Basin, Point Hope area. The Point Hope area was focusing
24 on Kotzebue information because we refused to cooperate.
25 So there is technical missing information. Whether -- you

1 know, I mean, that information needs to be looked at and
2 taken seriously.

3 In regards to technical knowledge or
4 intellectual knowledge or intellectual property, Brown &
5 Associates, who is your contractor, had only gone to Point
6 Lay for the Hope basin sale 193. They did not get
7 information from Wainwright or Point Hope for the Hope
8 basin sale 193. Point Lay was the only source for EPA. I
9 don't know if Brown & Associates worked for anyone else,
10 but they did admit to EPA -- admit that that was what they
11 got when they started talking about their permits, water,
12 air.

13 We have the right for taxation. The situation
14 that we are faced with doesn't make any sense. The State
15 is literally trying to give away its oil because of this
16 offshore situation. And the governor is getting whipped
17 for trying to do it. Say, hey, wait a minute, man, you
18 are giving it away. We are paying 80 cents on the dollar
19 for you to drill oil. We are reimbursing you 80 cents on
20 the dollar here in Alaska on shore. And we are willing to
21 give you even more. And that's when the governor got
22 slapped around.

23 But I truly believe that there is oil here on
24 shore. I don't know why they are not going after that.
25 It's safer. For all we know, it's more than what ANWR

1 has. And this is outside of the petroleum reserve. We
2 are not even talking about Kotzebue, Fairbanks.

3 Their situation is -- is an interesting one; so
4 is ours. We have to give 70 percent away. Are we going
5 to deal with that? Have you ever decided to give away 70
6 percent of your paycheck to someone else? That's what we
7 are faced with. Onshore.

8 And if the government is willing to reimburse us
9 for that, then maybe you got something going. But still
10 our government -- our businesses should have an
11 opportunity to develop what is theirs onshore and not be
12 told by these oil companies that's the way to go. You
13 don't have any oil. Well, that might not even be true.
14 We need to know what the real facts are because I don't
15 know what they are. I'm trying to understand.

16 MS. ERMA HUNNICUTT: Excuse me. Can we
17 have some water or something? We are getting dry.

18 DR. JIM KENDALL: I think we are going to
19 have to take a short break. Let's take a short break
20 here. And I know our recorder needs to take a break, too.
21 So let's take a ten-minute break. And if people want to
22 make additional comments, we can come back.

23 (A break was taken.)

24 DR. JIM KENDALL: Okay. I know it's late,
25 and people have been here a long time. And we probably --

1 I know we should have had the break sooner. I didn't
2 realize that the coffee maker is locked up. And I asked
3 where is the coffee, and the coffee maker is locked up.
4 Next time we will know they have the room unlocked with
5 the coffee maker to make the --

6 MS. ERMA HUNNICUTT: Just tell the oil
7 companies to send us pop and water.

8 DR. JIM KENDALL: The oil company?

9 MS. ERMA HUNNICUTT: Yes.

10 DR. JIM KENDALL: They can do that. I
11 can't. But then I will be breaking the law if I drank
12 their coffee. Okay. We went around the room once. We
13 had the names. We asked for anybody who wanted to speak.
14 I want to make sure no one leaves here feeling they didn't
15 have a chance to express the way they feel. So right now
16 if anybody else would like to speak, I want to make sure
17 no one feels they didn't -- they didn't get it on the
18 table here. This is important. Going once.

19 MS. PEGGY FRANKSON: I'm just curious how
20 much weight bearing are these hearings for the Secretary
21 of Interior when he makes his decisions? Is he going to
22 be reading all of these comments? Is he going to be aware
23 of how we feel? Is he going to get this totally in
24 writing in front of him in black and white?

25 DR. JIM KENDALL: My understanding is --

1 they are the experts. We take everything verbatim. There
2 is also summaries prepared. They are available to the
3 Secretary and the staff. Whatever format they want it in,
4 the Secretary and staff, we provide it. We make sure the
5 verbatim transcripts are available, summaries are
6 available, everything. And once you pass it up the chain,
7 we only have so much influence. But one thing we have to
8 focus on is to make sure no matter what is said, whatever
9 is recorded is available and put on the table. I mean, we
10 can promise you that. That's our job. There was
11 another --

12 MS. ERMA HUNNICUTT: Does the Secretary
13 ever make a comment? I mean does he ever -- about the
14 concern at that they made, does he ever talk about -- does
15 he ever talk? I mean --

16 DR. JIM KENDALL: Yes, he has talked among
17 his staff. Sometime he will --

18 MS. ERMA HUNNICUTT: But we never hear
19 from him.

20 DR. JIM KENDALL: They send us. And I
21 will take the message back that you want to hear from him.

22 MS. ERMA HUNNICUTT: I want to know what
23 he have to say after he listen to all the comments.

24 DR. JIM KENDALL: Leo, do you want to say
25 something?

1 MS. AGGIE FRANKSON-HENRY: Aggie
2 Frankson-Henry, for the record. My question is on seismic
3 testing. When did they start seismic testing in the
4 Chukchi Sea and Bering Sea? Who gave them the permits to
5 do seismic testing? What effects does it have on -- on
6 people, on the Inupiat people? And what effects does it
7 have on the marine mammals? What marine mammals die from
8 seismic testing? Those are my questions because we rely
9 on those resources, and the marine mammals rely on those
10 resources such as plankton and all the other bottomless
11 sea creatures. I see pictures of seismic testing and what
12 it does in the bottomless ocean floor.

13 And why can't people look back when they are
14 doing seismic testing? Is it -- is it caused by
15 radiation? What is the scientific knowledge of scientific
16 testing and the effects it has and the impact it has
17 within the coastal communities of the Arctic Slope?

18 We need to know about seismic testing. We need
19 to know these, and we need these answers back in black and
20 white. Like from -- like -- like we need to hear also
21 from the input of the environmental impact statements, the
22 final decisionmaker, his comments on our comments. We
23 haven't -- you know, it's -- it's really important. It's
24 really important to know because we know how many
25 decibels -- how many decibels does it -- does it impact

1 the marine mammals? How many decibels does it take to
2 impact the creatures in the bottom of the sea? Does it do
3 something to the bowhead whale's stomach, seismic testing?
4 Does it pop the drum, eardrums of the seals?

5 It's like standing -- to me it would be standing
6 in this building with a lot of speakers in a concert,
7 maybe even more. I don't know how many -- I mean, put
8 that by a whale. Let us have a picture of all those
9 speakers that, you know, that affects the marine mammals.
10 We need to know these things. Who gives them the right to
11 do seismic testing? How come they never come to our
12 community so that we can oppose seismic testing along the
13 coastal communities? These are important. And we know
14 that offshore development, if it doesn't come, you know --

15 Our mayor -- I support the mayor of the North
16 Slope Borough. He's getting really worried now within his
17 statements in the -- in the newspapers today in -- in ADN
18 or Arctic Sounder, you know, with -- what do they call
19 that? It's within the communities along the -- the Arctic
20 and the other communities within that one, that the State
21 of Alaska did not pass or it didn't go into -- the coastal
22 management zone. Yes. No, that's --

23 Can BOEMRE try to help us and ask the governor
24 or go to the State of Alaska to encourage them that we
25 need to be heard, the coastal communities within the

1 coastal management zone? Is it possible? We know we get
2 our education when we go to elementary school, high
3 school, and further on our education. And they are all
4 federally and State funded, along with our housing. And
5 now we are seeing all this devastation in the Lower 48
6 because of tornadoes or hurricanes or flooding now. And
7 we really do hurt for the people down there. We really
8 care. And I think that the federal government should care
9 like they should care for us, too, that are going to be
10 highly impacted if there is an oil spill.

11 Thank you.

12 DR. JIM KENDALL: Thank you very much. On
13 this side of the room, any other comments before I go back
14 to that side of the room?

15 MS. LILLIAN AANAURAQ LANE: Lillian
16 Aanauraq Lane. I think the bottom line of all of this is
17 that if anything is going to harm our animals out in the
18 ocean, and once that is harmed, it will affect -- it will
19 have an effect on -- a ripple effect on everything that
20 depends on them. And we don't want that to happen.

21 DR. JIM KENDALL: Thank you. I walk way
22 back there. Anybody else over here or back here? As I
23 walk back to this side of the room, it looks like we are
24 getting ready to wrap this up. Everybody is tired.

25 MS. PEGGY FRANKSON: I'd like to invite

1 every one of you over to my home even before you fly out
2 tonight, if you are flying tonight. Look in my freezers.
3 You are going to see all what's in my freezers. That's
4 all going to be Eskimo food. You will see my big family
5 and, without that, we wouldn't -- we would be in so much
6 poverty, we would be starving to death.

7 I mean, I want you to go back and tell the
8 Secretary of Interior that we -- we depend on these --
9 these animals, these mammals, all of our sea mammals to
10 eat every single day of our lives. It's -- my kids are
11 raised on it. I mean, my husband hunts them. Our family
12 hunts them. You know, I invite every one of you to go
13 look in my freezer. Everybody else in this community, I'm
14 sure they would give you that same offer. Their freezers
15 are full of Eskimo food, nothing else.

16 DR. JIM KENDALL: Thank you. Thank you.
17 Jack, did I see your hand?

18 MR. JACK SCHAEFER: Jack Schaefer again.
19 Seismic, now that it was touched on. There is an
20 exemption for the U.S. Fish & Wildlife Service and the
21 National Marine Fisheries Service on addressing impacts
22 and having public hearings and doing something about their
23 authorizations for incidental take and the impacts on
24 animals for seismic activities. Native Village of Point
25 Hope went to court three years in a row and lost three

1 years in a row because when the judge made a decision, the
2 season was over and it was moot.

3 But seismic testing has started in the '70s.
4 And then it continued on for a nine-year program from 1980
5 to 1989. And they did 2-D seismic from the Canadian
6 border all the way to Point Hope, every square inch. At
7 that very same time we were dealing with the United
8 Nations on the impacts of animals also doing one on Red
9 Dog Mine. There was something like seven out of ten seals
10 that were sinking in the winter. They were skinny. They
11 don't sink, but they were malnourished. And we reported
12 that to the UN and then we were distracted by this Project
13 Chariot issue cleanup. So we were never able to follow
14 through on that issue.

15 Now, it took a while for them to recover. And
16 now we have gone through another three years of the
17 seismic stuff. And there is still more to go.

18 Someone had asked in one of the earlier hearings
19 a couple years ago to define seismic. And that person
20 went home and looked in the dictionary and found out that
21 the definition of seismic is earth shattering. So it's --
22 you know, it's hard to deal with this as if we are talking
23 to numb people that can't hear or are numb to this and
24 don't respond.

25 One employee out of NMFS did admit that he was

1 retiring and he said that straight out before we started
2 our hearing -- I mean, during the hearing. And so there
3 were three hearings on seismic, but we never got anything
4 done with it, but we did have impacts. We have impacts
5 now. Nobody is willing to carry a camera around. I heard
6 that walruses and seals had blown eardrums. The walruses
7 were distracted from Kaktovik straight to Russia when
8 Alaska Eskimo Whaling Commission gave the go-ahead for
9 seismic activities over there.

10 We didn't get to fill up our freezers that year.
11 That was three years ago. We reported to the National
12 Marine Fisheries Service, Fish & Wildlife Service, and
13 their response was that it was normal. They assigned it
14 to a veteran who had worked for the U.S. Fish & Wildlife
15 Service for decades, John Trent, who was soon to retire or
16 die on the job. So he was able to say that with a
17 numbness.

18 It's -- it's hard to deal with this stuff and
19 try to explain, but at the same time, having these type of
20 things being brought back to us as, you are not a
21 scientist; you don't have any photographs; we don't
22 remember these tests that were taking place in the past;
23 we don't know how much of a time frame we gave for
24 recovery. Was there very much tomcod this year? Last
25 year? From seismic part of the food chain was lost.

1 Again, there will be some nourishment problems
2 with part of the food chain because of seismic, which is
3 another reason why there should be time to wait until
4 these species recover from this earth-shattering
5 experience that they went through with this 2-D, 3-D that
6 were done by China and the United States.

7 One of the interesting statements that were made
8 or in response was we were completely unaware of this, but
9 in 2006 there is this group that is called the Indigenous
10 Peoples Council for Marine Mammals. Had two federal
11 agencies administering the Marine Mammal Protection Act.
12 Fish & Wildlife Service and the National Marine Fisheries
13 Service entered into an umbrella agreement on how to
14 negotiate these section 119 cooperative agreements. We
15 were completely unaware that this was going on. I didn't
16 know about it.

17 When the tribe said no, they went to these
18 nonprofit organizations. Beluga whale, polar bear, fur
19 seal. Whaling Commission got this agreement, we will
20 protect these animals. But they called it conflict
21 avoidance agreement, good neighbor policy, whatever.
22 Whether there was complete attention focused on that is
23 unclear because whenever my uncle went to talk to Diomede,
24 to Gambell, when they talked about their seal, their
25 walrus, they said, hey, wait a minute, there is something,

1 you know -- and whale. They indicated, well, I don't
2 agree with this agreement.

3 Nevertheless, there is this agreement in 2006,
4 which I personally feel is something that's not legal.
5 That delegation of authority was done for the purposes of
6 providing funding and providing a better way of managing
7 animals and having a cooperative agreement with the State
8 to manage these animals.

9 But what did they do instead? They go ahead and
10 do the same thing on the side to allow industry to create
11 these impacts which we can't deal with in a legal
12 position. And so part of this food chain is broken and we
13 are way behind on this intellectual property. The
14 information in regards to the Chukchi Sea as to what
15 impacts have taken place now as from those seismic tests
16 and allowing it to recover is something that needs to be
17 done so that we can continue to survive.

18 You know, everyone said that -- that we get our
19 food from the ocean. Go buy a steak at the store. It's
20 \$24 a pound. And meat is something that you like, unless
21 you are a vegetarian. And if you are a vegetarian, you
22 got black eyes like an Indian. And I got to have meat. I
23 have to have meat. I just have to do it. Otherwise I'm a
24 98-pound weakling. And we have no other way. We don't
25 have any other way.

1 Money don't grow on trees and it doesn't rain
2 animals. We have to go out and get them. They come to
3 us, and that's how we live. And we have no other way.
4 Aside from that, you know, it's a -- you know, it's an act
5 of -- it's an imminent threat. Native Village of Gambell
6 used that term. The United States responded by saying the
7 imminent threat doesn't click until we turn that first
8 stone on the ocean floor. And what did Bush say? We got
9 an imminent threat from this Al Quaida, or whatever we
10 call these people. And he went in there and did his
11 damage because he said there was this imminent threat.

12 It's funny how that imminent threat definition
13 had changed and evolved from the 1980s to now to the time
14 that, you know, Bush had done his thing.

15 But we are faced with that. That threat is
16 emotional, mental until it hits our nutritional needs, and
17 it already had with the walrus and the tomcod, which the
18 seal survive on. How long will it take for us to see that
19 decline in the population?

20 And we haven't even talked about some other
21 outside interests that cause influence on us. When I was
22 young, my grandmother used to skin and take the face off
23 of seals, and she sold each face for \$2.50. There was a
24 bounty on seals. This was -- I remember it in 1967, 1968,
25 when I tried to use one of them as a Frisbee, she got on

1 my case, my grandma.

2 MS. EMMA KINNEVEVAUK: Not the face, the
3 head.

4 MR. JACK SCHAEFER: With the eyes, too?

5 MS. EMMA KINNEVEVAUK: No, just the head,
6 the seal head.

7 MR. JACK SCHAEFER: So I decided to ask,
8 what was that about? Was it an environmental issue? Was
9 it a health issue? Was it from nuclear testing that took
10 place in 1955 in the Arctic Ocean by the U.S. government?
11 What was it? The only person I knew to ask was John Trent
12 because he's been with us for decades. So he decided to
13 look into it, and he came to an answer. And he said it
14 was the commercial fisheries had indicated that the seal
15 had caused problems with their nets and therefore has
16 caused a bounty at \$2.50 per. And my grandma, she was
17 able to get her chewing tobacco with that.

18 But there was an act that had taken place that
19 we had no control over but were very fortunate to live
20 through. But it didn't get carried away. And I don't
21 know how it stopped, but I just asked on a memory that I
22 had. I thought it was an environmental one. It turned
23 out to be a commercial outside interest influence,
24 commercial fisheries.

25 Management of renewable resources is so

1 important, and it's a responsibility for the federal
2 government in regarding and maintaining the optimum
3 sustained yield of all species and to step in when that
4 delegation of authority has been betrayed or failed by a
5 state.

6 We had seen recently that for the second year in
7 a row since we started to look at this that Yukon River
8 people cannot get salmon for subsistence purposes, and
9 that's because of commercial fisheries bycatch. And we
10 did explain this and indicate that that was a problem,
11 both to Salazar when he came to Barrow that there is this
12 full faith and credit issue that needs to be addressed in
13 regards to what happens to other people has to be
14 respected by us also in regards to whatever judicial
15 rulings had taken place. We treat everybody the same.
16 This is the United States.

17 So this -- really need to look at this whole
18 picture and take another look and take another approach
19 and avoid this dictation or forceful arrangement that is
20 done by these oil companies to look at other areas which
21 are in their interest and not in ours because they get
22 this for free. There is nothing that's in our interest at
23 all. We don't get a single dime out of it. There is
24 probably one or two people from this community that will
25 work there that has any training at all, and no one else.

1 There is so much influx from the Lower 48, both
2 onshore and offshore in oil and gas development. There is
3 a lot of oil out there that can be developed elsewhere we
4 shouldn't even be talking about it. The discussion should
5 have died when we said and when you agreed and when others
6 agreed that you can't clean up oil in ice. End of
7 conversation. But it's still going on today, you know.

8 And there should be an investigation on the
9 State, on this whole process is to, you know, doing an
10 inventory. And it shouldn't be focusing on the State. We
11 asked the previous hearing who is responsible for this.
12 There were other states. Rhode Island said no to
13 offshore, and the federal government honored that. But
14 did that happen to Alaska? No. The governor said, come
15 on down. We welcome you. And that's -- that's the
16 situation we are in. The governor gave his blessings.

17 The State is involved. They have this
18 arrangement with the federal government. What happened to
19 the tribes that are on the equal level of the federal
20 government and higher than the State of Alaska? And why
21 aren't we active on this coastal zone management program
22 in regards to local control, local decisionmaking that
23 Governor Murkowski, Frank Murkowski, killed when he
24 amended that coastal zone management program while he was
25 the governor of Alaska.

1 And there is publications or statements staying
2 that we are going to lose this coastal zone management
3 program. It's going to die on the 30th, and local people
4 won't have any input. They didn't have any input. It was
5 killed by Frank Murkowski. And the tribes had that right.

6 And Santa Barbara brought that forth in a
7 lawsuit, coastal zone management program. We had an issue
8 here. We had a spill. We want control over that, not the
9 State of California. And they won. And that's a
10 community, Santa Barbara. And we are a tribe. Tribes
11 have that authority. There is only 1.5 million dollars
12 that was appropriated for the State of Alaska under this
13 coastal zone program. We should have the same amount at
14 least, but that's not even close to covering what we have
15 to do in order to assess what we are dealing with.

16 Thanks.

17 DR. JIM KENDALL: Thank you, Jack. Okay.
18 I see we got a study group here, which is good. I'm glad
19 to see that. I've got someone taking pictures here. Is
20 there anyone else that we have missed? Going once, going
21 twice. Caroline, would you like to make a final comment
22 before we close the meeting?

23 MS. CAROLINE CANNON: I can.

24 DR. JIM KENDALL: Absolutely. The floor
25 is yours.

1 MS. CAROLINE CANNON: Very, very
2 productive meeting. I think everybody was heard.
3 Everybody had the opportunity. Normally when we hold
4 these meetings, a plane is either waiting for them or
5 what. And I just feel this is all the good. We have
6 finally been heard, and many trips to D.C. We met with
7 Echohawk. We have had invitations to Salazar to come to
8 our community. We have given invitations to Michael
9 Bromwich and many high official people in D.C. to get a
10 firsthand look like we are talking about to educate them
11 and then let them see what is so valuable to us, why it's
12 so important that they hear us out.

13 It's one thing when people do come into their
14 community and hold a meeting, but when they stay
15 overnight, it means much. At least you can see what we
16 are talking about, get a feel of what we are talking
17 about. So I'd really express my thanks, and I'm hoping
18 that many meetings will come forth.

19 And one thing that we always try to say and
20 stress is please respect our calendar year. Respect. We
21 will show respect. You will receive respect. But we just
22 ask that you work -- it works vice versa.

23 And those invitations are from our heart.
24 Please go see and look and feel what we are talking about.
25 You know, we have -- we just had a three-day feast.

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1 Everywhere you look, regardless how tired they were, they
2 had a smile. And it's just to refresh. Now they are
3 doing the cogruk hunting. They are going to get the skins
4 ready. It's an all-year-long process. We will celebrate
5 Thanksgiving, the first rush ice, Christmas. And it just
6 evolves all year. And yet there is times that we never
7 landed a whale. And that circle is incomplete when that
8 occurs.

9 Yes, it's a blessing when Barrow sends, you
10 know, how many boxes of muktuk and kuak. Or when you go
11 up there and they bless you, you got to pay \$2 a pound of
12 excess weight just to help an elder because that's their
13 meat. It's our vitamin. It's our minerals. And if
14 anything happened to the ocean, that's why we speak.
15 That's why we come to these meetings because it's there
16 near to our heart. And we are speaking on the little
17 ones, on their behalf.

18 But I feel that there has been some improvements
19 in this area, that the communication will get better, but
20 we can't do without the other. You need to hear us out.

21 And I felt this evening that everybody expressed
22 their thoughts, and I appreciate your time. And you take
23 that offer that Peggy gave. Go to her home. Go look at
24 her freezer. See what we are talking about. Go to the
25 store before you leave. Go to that freezer section and

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1 see how much a pound of meat.

2 And even just to look at that graveyard as you
3 take off at the airport, there is whale bones. And our
4 ancestors did this before our time. It is surrounded with
5 whale bones. Our loved ones that are put away are
6 surrounded by whale bones. So everything -- that's why
7 it's so -- that's why it's critical that we speak on
8 behalf of the marine mammals. We throw one jaw back to
9 the ocean because it belongs there. These were set before
10 us. Our ancestors placed these in place for us to
11 practice. And it's 2011, and we still continue
12 practicing. I'm sorry. The head. That's how tired I am.
13 I wasn't feeling well, but besides the point.

14 We still carry through these traditions. We go
15 out there. The men are out there around the clock. The
16 ice condition has changed, but the dances, the practice,
17 are still strong because we were given direct orders by
18 our umailiks, the whaling captains. Some things have
19 changed a little but, you know, when you know it in your
20 heart, it's in your blood, it will never go away.

21 That's why I express at our meetings,
22 traditional knowledge must be recognized. It's so
23 critical that they use and recognize traditional knowledge
24 because I think we could go a long ways. We have our
25 experts just like the rest of science. They have their

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1 experts.

2 And I happened to be in D.C. when there was a
3 snowstorm. They call it a snowstorm, one inch of snow.
4 I'm like, oh, my goodness. They are shutting down the
5 city for that? And we have storms that go for days. They
6 have no clue. So it's critical that we talk about these
7 things. When we have those storms, there's no way an
8 airplane or a chopper or a submarine or ship that's going
9 to come within hours. We know that. Sometimes we have
10 patients in that clinic 48 hours because of that. We know
11 firsthand what it's like to live in this harsh Arctic
12 environment, as they say.

13 Again, thank you. Thank you and have a nice
14 trip back.

15 DR. JIM KENDALL: Thank you very much,
16 Ms. Cannon. And on behalf of the team for BOEMRE that
17 came to visit, I want to thank the Native Village of Point
18 Hope and the Elders for allowing us to come visit. Thank
19 you for participating. Everything you said has been
20 recorded. This is very, very important.

21 And we are going to do our best to bring this
22 together, and when we pass the information up, we will do
23 our best to make sure it's extremely accurate. So thank
24 you very much. And have a good evening, which is just
25 about over. It's now nighttime, almost tomorrow morning.

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1 So thank you very, very much.
2 (Proceedings adjourned at 11:00 p.m.)
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1 REPORTER'S CERTIFICATE
2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:
4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.

12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.
15

16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska

20 My Commission Expires: November 5, 2012
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PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Fairbanks, Alaska

Taken June 23, 2011
Commencing at 7:05 p.m.

Volume I - Pages 1 - 107, inclusive

Taken at
Westmark Hotel
Gold Room
813 Noble Street
Fairbanks, Alaska

Reported by:
Mary A. Vavrik, RMR

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A-P-P-E-A-R-A-N-C-E-S

U.S. Department of the Interior:

Bureau of Ocean Energy Management, Regulation
and Enforcement:

Dr. Jim Kendall
Alaska Regional Director

Sharon Warren
Program Manager

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Scott Blackburn
EIS Technical Writer and Editor

John Callahan
Public Affairs Officer

Michael Haller
Community Liaison

Office of the Solicitor:

Steve Scordino

Taken by: Mary A. Vavrik, RMR

BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

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P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: Okay. It looks like we
can get started here. Thank you very much for coming
tonight. This is the public hearing for the revised draft
EIS for sale 193. That is a mouthful. We are going to
walk you through the process and exactly what this meeting
is so everybody starts from the same basis.

Now, one thing I'd like to clear up -- and we
ran into this at two other meetings. We got into the
meeting and someone said, who are you people. And it's,
like, I think we need to fix that at the beginning.

We are not an oil company, and we are not from a
nongovernmental organization. We are a federal agency.
We are the Bureau of Ocean Energy Management, Regulation
and Enforcement. We are responsible for managing the
energy and mineral resources on the Outer Continental
Shelf. Our Bureau is within the Department of Interior.
Our boss is the Secretary of the Interior. So that's who
we are.

Now, before we get into the nitty-gritty of the
details, I want to introduce the folks here. Mary Vavrik
is over there taking notes. We are taking down everything
that's said. So please, when you are given the
opportunity to speak, state your name. We want to get
that for the record.

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We have Mike Haller here.

MR. MICHAEL HALLER: Right here.

DR. JIM KENDALL: Mike is our liaison for
Native communities. We've got John Callahan. John, he's
from our Office of Public Affairs. Steve Scordino, I
believe, is still out front. He is an environmental
compliance subject matter expert and an expert for other
things. We have got Scott Blackburn. Scott is also out
there. He is our technical editor for the document.

And the other two individuals sitting up here
are extremely key to this. We have got Sharon Warren.
Sharon is the project manager for this. She knows the
document inside out and backwards. It's her job to put it
together. Next to her is Michael Routhier. Michael is
the actual coordinator of the document, so he gets the
pieces and puts it together from all the scientists, and
Sharon makes sure it all flows. That's who is here.

We are doing this a little bit different
tonight. Usually we just open up the mike and have people
speak. But to make sure we are starting from the exact
same place, we are going to take about the first five or
ten minutes to tell you exactly what this is. There are
times when people think that this document is the decision
document. This EIS that Sharon is going to speak about,
it's not a decision document. It's information we pass to

1 the decisionmaker. And that's why we are here, as Sharon
2 is going to explain.

3 We need your help to make sure this document
4 includes everything the decisionmaker, the Secretary of
5 the Interior, needs to make the best possible decision.

6 We have had meetings like this in the past in
7 many cities and, whenever we do this, there is always some
8 I won't call it criticisms, but suggestions on how to do
9 it better. So what we are going to do tonight is, aside
10 from having a little briefing to tell everybody why we're
11 here so we all start the same way, we are going to use
12 sort of a more random approach for speakers. That's why
13 you were asked to put your name in the big silver bowl out
14 there. Your name goes in there, and we reach in, we pull
15 it, and that's your time to speak.

16 If for some reason you are not in the room, you
17 stepped out for a minute, that doesn't mean you are not
18 going to speak. I'm just going to put it back in the
19 bowl. Okay? I don't want to miss you. If someone comes
20 15, 20 minutes from now, they can fill out a form, give it
21 to somebody, give it to us, and we will put it in the
22 bowl. The important thing here is everybody has a chance
23 to speak. And we will stay here for as long as it takes.
24 We are not going to cut it off at 9:00 or 9:30 or 9:45.
25 If we have to stay here till 10:00 or 10:30, we will.

1 We will ask, though, to please keep your
2 comments to three to five minutes. We are hoping that a
3 lot of you will have something to say. That's what this
4 meeting is for, to get information from the different
5 stakeholders in the process and make sure their concerns
6 and input go into the document. So I want everybody to
7 speak and we want to make sure people or an individual or
8 two don't monopolize the entire conversation. Everybody
9 has a chance here. Okay?

10 Now, with that, I would like Sharon to walk you
11 through the process of why we're here. Sharon just
12 reminded me, please. If you have got cell phones, turn
13 them off or at least put them on the buzz thing. That's
14 what I do. When I'm told to turn it off, I put it on buzz
15 or vibrate.

16 With that, Sharon, take it away.

17 MS. SHARON WARREN: Thank you again for
18 coming. Can everybody hear me all right? All right.
19 Excellent. Why are we here today? We are here today to
20 get your comments on the specific document that's out
21 there. It's the Revised Draft Supplemental Environmental
22 Impact Statement for Chukchi Sea sale 193. And what is
23 sale 193? In 2007 we did an environmental impact
24 statement and sale 193 in the Chukchi Sea was held in
25 February of 2008. And six companies received leases from

1 that sale. We offered 29.3 million acres and 2.8 million
2 acres was actually leased.

3 Then what happened? Days before the sale,
4 plaintiffs sued to invalidate the lease sale. They
5 alleged that the environmental impact statement did not
6 address the potential impacts in the document. There was
7 not an order to stop the sale, so the sale continued, and
8 that was the reason why the sale was issued.

9 And we issued the leases, but in July of 2010,
10 the U.S. District Court for the District of Alaska, which
11 is Judge Beistline in Anchorage, ruled that most of the
12 EIS was satisfactory, but there were three concerns that
13 needed to be addressed before -- for the agency to meet
14 its NEPA obligation. And that's the National
15 Environmental Policy Act obligations.

16 So the three issues the Court wanted us to
17 address was that the Court said the EIS failed to analyze
18 the environmental impact of natural gas development
19 despite any industry interest and specific leases for such
20 development. When the sale was offered, there was
21 incentives to the companies to produce the natural gas,
22 and the judge said you offered those incentives, but you
23 did not adequately assess the environmental impacts of
24 that natural gas to be produced based on these incentives.

1 whether or not missing information identified by the
2 agency was relevant or essential under attention the
3 federal regulations. The Council on Environmental Quality
4 has regulations that you must follow that when you have
5 missing information, you have to say -- you have to
6 determine whether or not the cost of obtaining the missing
7 information was exorbitant or the means of doing so was
8 unknown.

9 When the plaintiffs sued us, the agency, they
10 filed an exhibit that listed all the statements that were
11 made in the environmental impact statement of where the
12 agency said we didn't know, we have uncertainty, and that
13 when the judge looked at it, said that's pretty
14 convincing, but you need to go back and you need to follow
15 the regulations and to assess all the statements that you
16 have made in the environmental impact statement.

17 So what did we do in response to the court
18 order? We drafted a supplemental environmental impact
19 statement to address the Court's concerns. That draft
20 supplemental environmental impact statement was released
21 in October of 2010. We received over 150,000 comments on
22 that draft supplemental environmental impact statement.

23 We held public hearings in Kotzebue, Point Hope,
24 Point Lay, Wainwright, Barrow, and Anchorage, as well as
25 government-to-government meetings in those communities.

1 And I'm going to turn it over to Mike to so he
2 can explain what we did next.

3 MR. MICHAEL ROUTHIER: So in most EIS
4 processes, you go out with a draft to invite public
5 comment, hold some meetings, and we look at those public
6 comments and develop a final EIS. Here, like Sharon said,
7 we received over 150,000 comments, and we noticed a
8 recurring theme of many of those comments was -- and
9 again, this is on the heels of the Deepwater Horizon
10 event. That theme was you guys need to assess the
11 possibility of a very large oil spill in the Arctic as a
12 result of this lease sale.

13 So as an agency, we sat down and considered our
14 options and decided that, yes, it would be appropriate to
15 analyze a very large oil spill scenario in our EIS. To
16 ensure that it received the full amount of analysis it
17 warranted, we decided to do that in our EIS. And because
18 this was a very substantial new piece of analysis, we
19 decided that we were going to need to republish the draft
20 EIS because this contains so much new information.

21 That's basically the document that brings us
22 today. We republished the original draft SEIS, including
23 the very large oil spill scenario and are now publishing
24 this as a revised draft supplemental environmental impact
25 statement. And tonight we're here to solicit and record

1 public comments on the document to get people's feedback
2 on whether the document is sufficient. And we will then
3 take those comments, incorporate them into our final SEIS,
4 and send that on to the eventual decisionmaker.

5 So we mentioned that one of the main drivers of
6 this revised document was the very large oil spill
7 scenario, so we want to talk a little bit more about what
8 that is. Basically we asked our expert geologists what
9 the biggest oil spill possible in the Chukchi Sea planning
10 area could be. This is a purely hypothetical event. We
11 are not talking about a specific plan to drill. This is
12 purely hypothetical and a scenario to inform our
13 environmental analysis.

14 The very large oil spill is a term that is
15 different than the term which you might hear elsewhere,
16 which is worst-case discharge. Whereas a very large oil
17 spill is a tool in our NEPA analysis, the worst-case
18 discharge is something specifically required by our
19 regulations to be included in any exploration plan.

20 So if this lease sale were to be affirmed or
21 affirmed in part and a company were to, down the road,
22 submit an exploration plan to actually do drilling in the
23 Chukchi Sea, that proposed exploration plan would have to
24 include a worst-case discharge. That's a different
25 analysis.

1 It would incorporate a lot of additional
2 information, such as what kind of well is it, where is the
3 well, what reservoir, what kind of oil, what kind of
4 technology would be used, what kind of safety precautions
5 would be taken and so forth. And it's that subsequent
6 analysis that would inform the decision on, okay, what
7 kind of oil spill response plan would be required if that
8 exploration were to go forward.

9 MS. SHARON WARREN: Again, the input that
10 we need tonight from you and until July 11th when we have
11 a public comment period open is to have your comments on
12 this document that we have out there, this revised draft
13 supplemental environmental impact statement for sale 193.
14 There is a 45-day comment period. This was released out
15 to the public on the 21st of May. And so the comment
16 period closes on July 11th.

17 There is a website that you can go to to click
18 on and submit your comments. We are using regulations.gov
19 for the comments, and we have some handouts that we will
20 put out here so that you know how to go to our website and
21 where to click on to submit your comments. And that's
22 what we are asking. That's why we're here tonight, to get
23 your views.

24 So the next thing is, what happens after these
25 hearings? As Mike says, we will take these comments,

1 incorporate them, and do and make a final supplemental
2 EIS. We are on a court deadline. We are mandated by the
3 Court. This document is still in litigation. The Court
4 issued an order on the 19th of May and said, however you
5 want to do it, in addition to doing the court order, items
6 that he had as concerns and to do this, he wants the
7 Secretary to make his decision on whether to reaffirm the
8 sale, modify the sale, or cancel the lease sale by the 3rd
9 of October of this year.

10 So in order to do that, we are going to
11 incorporate these comments. We must have the final SEIS
12 out there to the public filed with the Environmental
13 Protection Agency in early September. So there is a
14 30-day waiting period before the Secretary of the Interior
15 can make the decision. Once he makes that decision, this
16 document, the final EIS, and his decision will be filed
17 with the District Court, and there will be further
18 briefings with the District Court, and then the judge will
19 decide whether or not the agency has met its obligation
20 under the National Environmental Policy Act.

21 And what we are going to do is, these posters
22 after we are finished, we are going to hang them along the
23 back wall so that when we have the break -- which there
24 will be probably a break, as time goes on, and Jim will
25 explain that -- he will give you an opportunity to go

1 along the back wall.
2 There is also some maps on the back wall that we
3 put up. One in particular is the sale 193 map that you
4 can see what was the sale 193 area that was offered,
5 what's the alternative. There is still alternatives that
6 are being looked at in the supplemental, so -- and then
7 also what was leased. The leased areas are both the gray
8 blocks and there are some red blocks because some of the
9 leases are within one of the alternatives that the
10 Secretary can decide to choose on this. So this whole
11 sale is back to the Secretary to decide what he wants to
12 do with the sale.

13 DR. JIM KENDALL: Thank you very much. I
14 noticed when they were up there, they were pointing to me
15 and saying Jim. I probably forgot to tell you who I was.
16 Yes, I'm a Fed. My name is Jim Kendall. I am the new
17 Regional Director for the Alaska Regional Office of the
18 Bureau of Ocean Energy Management, Regulation and
19 Enforcement. I came up here on a detail from Washington,
20 D.C. in January. It was supposed to be a two-
21 three-month detail. After six months I have fallen in
22 love with Alaska. I think I have some Alaska colleagues
23 that might like me, so I am moving to Alaska to join the
24 community of this wonderful state.

25 Also, I would like to point out we have some

1 members in our audience who are representing our leaders.
2 We have got the Representative Steve Thompson in the
3 audience. Thank you for coming tonight. Rhonda Boyles
4 representing Congressman Young. Thank you. And we've got
5 Tom Moyer representing Senator Begich. Would any of you
6 like to make a few opening comments?

7 UNIDENTIFIED SPEAKER: No.

8 DR. JIM KENDALL: All right. That's fine.
9 Now, with that, we are going to start the process where we
10 get input from you all. Now, this is real important
11 because we are preparing a document that goes to the
12 decisionmaker. It's also very much a public transparent
13 process. So we want input from folks. We want you to
14 read the document. Tell us what you thought. Tell us
15 what we are missing so when we give that document and all
16 the material that goes with it to the Secretary, he can
17 sit down with his staff and these materials and make the
18 best possible decision.

19 So you are part of the process. This is really,
20 really important. So once we start the comment period,
21 please state your name. Let's try to keep it to three to
22 five minutes so everybody has a chance and we are not here
23 till 3:00 in the morning. But if we have to, we will stay
24 till 3:00 in the morning. And if you have written
25 comments, please bring it up here. I'll give it to Mary

1 and that will be entered into the record, as well. So
2 Scott, will you bring over the bowl.

3 Now, we have never done it before this way, but
4 we are hoping that it makes it more fair and everybody
5 feels they have had an equal chance to do it. Murray
6 Richmond representing Senator Thomas. Thank you. Thank
7 you, Murray.

8 Our first selectee is Debbie Miller. Debbie
9 Miller. Come right up to the podium. The floor is yours.

10 MS. DEBBIE MILLER: I'm the lucky one.
11 Gee whiz. I'm Debbie Miller. I have lived in Alaska for
12 35 years. I have spent much of the last 35 years
13 exploring the Arctic, mostly during the summer months,
14 extensively in the Arctic National Wildlife Refuge,
15 Natural Petroleum Reserve, and I write books for children
16 and adults about the natural world.

17 I have not been to the Chukchi Sea. I have
18 traveled out on the sea ice north of Barrow when I worked
19 on a book about polar bears back in the mid 1990s. And it
20 was there that I learned about the culture of the Inupiat
21 people and how they are the bravest people and the
22 hardest people to go out into those sea ice, you know,
23 areas where the ice is moving, where bears are, you know,
24 struggling, swimming right now because we have such a
25 situation with the loss of ice. We are reading all about

1 that.

2 But this is an incredibly harsh environment,
3 always changing, a dynamic landscape. It would be the
4 last place I would ever consider a good place to have oil
5 and gas drilling, exploration and development. By -- just
6 by the nature of the weather, the wind, the storms, the
7 sea ice moving, the pressure ridges that I saw, the sound
8 of the ice sheets grinding against one another. So just
9 the nature of this place says to me aren't there other
10 places that are less sensitive that would be a lower risk
11 area to explore and develop oil and gas. The species, the
12 polar bears, are endangered or threatened.

13 I noticed in the report -- I just have now seen
14 this for the first time, and I turned to the polar bear
15 page on page 100, and it mentioned that, as a conclusion,
16 that the impacts appear to be minimal on polar bears with
17 oil and gas development.

18 And I would, I guess, question that in that if
19 you read a Canadian study that was done back in the 1970s
20 when I was doing my research, there was a gruesome study
21 that was conducted where the Canadian scientists purposely
22 oiled the fur of six polar bears to see what would happen,
23 and immediately those polar bears groomed themselves,
24 ingested the oil, went into convulsions, and they all
25 died. So we have had some studies that have looked at

1 what happens when a polar bear has its fur covered in oil.
2 So these are serious impacts if we have an oil spill.

3 The second biggest concern I would have is there
4 is no proven technology to clean up an oil spill in Arctic
5 waters, and that's also pointed out in your report on page
6 135. I was looking at the effect of ice on response
7 actions. It's very clear that you are going to be
8 hampered if you are out there in those kinds of conditions
9 as far as getting that ice, building the booms protecting
10 the area. Removing the oil with those ice conditions
11 makes it almost impossible in a lot of cases. So again,
12 the question would be why would we choose this area, a
13 high risk area, on the heels of the Gulf spill, the Gulf
14 of Mexico on the heels of Exxon Valdez oil spill. Why
15 would we go to such a high risk area when we have other
16 places to explore and develop and we have other choices
17 for our energy supply, namely renewable energy, solar,
18 wind, geothermal and all the other -- tidal. Wouldn't
19 this be a safer bet?

20 Thank you so much for your time and for coming
21 to Fairbanks and teaching us about all the work that you
22 put into this. This looks like a very interesting
23 document. I'll submit written comments at a later date.
24 Thank you.

25 DR. JIM KENDALL: Thank you very much. I

1 promise I will do my best not to destroy the names too
2 bad. The first name is Joseph. Joseph Aveoganna. The
3 floor is yours, Joseph. You can speak over there, if you
4 would like.

5 MR. DANIEL LUM: Hello. This is my son
6 Joseph.

7 MR. JOSEPH AVEOGANNA: Hi.

8 MR. DANIEL LUM: Joseph is shy. And so
9 I'm going to help him with this. And my name is Daniel.
10 I'm from Barrow, my wife is from Point Hope, and my son
11 has grandparents in Wainwright, all three out on the
12 Chukchi. Joseph, what kind of food do you eat? Tell
13 these people what you eat. Okay.

14 MR. JOSEPH AVEOGANNA: Bowhead whales,
15 fish, walrus and seals.

16 MR. DANIEL LUM: Do we eat a little bit of
17 that or do we eat a lot of it?

18 MR. JOSEPH AVEOGANNA: A lot of it.

19 MR. DANIEL LUM: Is this important to you?
20 Do you always eat this fresh good food from the Chukchi?

21 MR. JOSEPH AVEOGANNA: Yes.

22 MR. DANIEL LUM: What happened in Mexico
23 [sic] this year from what you learned from school?

24 MR. JOSEPH AVEOGANNA: The oil spill.

25 MR. DANIEL LUM: What happened to the

1 ocean when they had an oil spill?

2 MR. JOSEPH AVEOGANNA: Everything got sick
3 and died.

4 MR. DANIEL LUM: A lot of it got sick and
5 died. Nannuq, look at all these people. Look at them.
6 Whose ocean is this Nannuq?

7 MR. JOSEPH AVEOGANNA: Mine.

8 MR. DANIEL LUM: Does this ocean belong to
9 them?

10 MR. JOSEPH AVEOGANNA: No.

11 MR. DANIEL LUM: What do you want to tell
12 these people, Nannuq?

13 MR. JOSEPH AVEOGANNA: This is my ocean,
14 not yours.

15 MR. DANIEL LUM: Please stay out of our
16 ocean. Thank you.

17 DR. JIM KENDALL: Next on deck we have
18 Rebecca Schaffer. Rebecca. And after that it will be
19 Joseph Boyle.

20 MS. REBECCA SCHAFFER: Well, next time any
21 of us eat shrimp, we have to question where it came from
22 because it's keeping -- they are keeping it on the down
23 low. They are covering it up, and there is a big
24 percentage of it coming from the Gulf. People are dying.
25 They are bleeding from all their orifices down there, just

1 like the dolphins. This is all being hushed up.

2 So I mean, you know, it's kind of scary, you
3 know, what's happening to the oceans. That's why I wanted
4 to speak. I want to speak for the animals, for the ocean,
5 for the, you know, the endangered. With Fukushima, the
6 Gulf, Valdez, you know, our hindsight is 20/20, right?
7 But the animals, from the algae to the whales, you know,
8 are dying. They are endangered. It's all out of balance.
9 And why? Part of it is due to global warming, but a lost
10 it is due to, you know, mankind.

11 I would just like to believe that we have
12 evolved higher, a more higher consciousness, right, to
13 think outside the box, to think beyond oil.

14 My dad was in development, you know. Ironically
15 I'm sitting here. He's probably really groaning upstairs
16 because he was all pro development, you know. But in
17 reality, we have options. You know, I know that it's
18 threatening jobs and money. The state of Alaska is rich
19 because of oil. But you have to look at the bigger
20 picture. The bigger picture is that we take care of
21 everyone, including the ocean. You know, we take care of
22 future generations to enjoy all that as well.

23 So I think there is a lot of other alternatives,
24 you know. I mean, if there is hydrogen cars, I'm there,
25 Charlie, you know. I mean, geothermal, the sun. It's all

1 natural, nonpolluting, you know. So I think that's what
2 we all ought to be embracing. You know, with -- milk in
3 Hawaii on the big island is 3,000 times radiated with, you
4 know, the -- just radiated. You know, I have a daughter
5 living over there, you know. It's pretty scary, the
6 ramifications of our actions. The ramifications of the
7 Gulf Coast we are not even hearing about because it's
8 hushed up.

9 So anyways, I get a little impassioned, but
10 thanks for this hearing.

11 DR. JIM KENDALL: Thank you, Rebecca.
12 Joseph Boyle, and following Joseph will be Steve Kelly.
13 Joseph, the floor is yours.

14 MR. JOSEPH BOYLE: Hi. Joseph Boyle. I'm
15 a member of Laborers Local 942. I have been working up on
16 the North Slope for over six years now, primarily during
17 the winter. Some of the conditions I've seen, near
18 white-out conditions. I've worked in temperatures 80
19 below zero with a wind chill for 12 hours a day, seven
20 days a week for months on end. I think we really do need
21 to be drilling up there more. I think a lot of jobs are
22 at stake, mine personally, as well as tens of thousands of
23 others, they estimate.

24 But one thing I just wanted to say was as the
25 amount of oil declines in our pipeline, so do the jobs

1 here in Alaska. And it's a beautiful place, but at the
2 same time, I don't want to turn it into the biggest
3 national park on earth.

4 Some of the stop measures that we have up there
5 include -- I mean, we put diapers is what we call them,
6 but stuff underneath pickup trucks. And it's not just a
7 duck pond which is like a throw-down containment. It's
8 something you actually tie wire underneath the bottom of
9 the vehicles and that goes to every single piece of
10 equipment that we have up there. It's incredibly
11 environmentally safe.

12 And I mean, literally, if there is one drop of
13 oil or any grease hits the ground you literally have to
14 shovel it up and pick it up. And I've walked for miles
15 and down right-of-ways and literally picked up about the
16 equivalent of three snowballs, which is mainly just snow.
17 It's really not that contaminated. I mean, it's a
18 beautiful place up there. But there really is nothing up
19 there except the pipeline workers, at least when I'm
20 around.

21 But that's about all I have to say. The amount
22 of environmental impact is so minimal that it just boggles
23 my mind. But that's all I've got for now. Thank you.

24 DR. JIM KENDALL: Thank you, Joseph.
25 Steve Kelly, followed by Brent Helms. Steve, the floor is

1 yours.

2 MR. STEVE KELLY: My name is Steve Kelly.
3 I live at 4140 Owl Drive, Fairbanks, Alaska. I've worked
4 heavy construction since 1975. I retired in 2003. In
5 1980, '81 and '82 I worked on offshore islands up in
6 Prudhoe Bay. So I worked on BF 37, Duck Island and Seal
7 Island, for sure. And technology we had then was pretty
8 good, but the technology we have now, it would be almost
9 impossible for me to believe that we do not have ways of
10 going and getting those resources and not doing any harm
11 on the environment.

12 It's pretty shallow. It's only 150 feet at the
13 deepest. We can make islands that deep. We did it in
14 the '80s. We can still do it. And we are talking about
15 50-, 60,000 jobs. We are talking about making the United
16 States energy dependent [sic]. We can't just turn our
17 back on it because we think it can't be done. We have to
18 somehow go get that resource, provide work for ourselves,
19 take care of ourselves, save the environment and not
20 damage the food and the sea for everybody else. It has to
21 be -- there has to be a way we can do it. And these
22 people will find a way to do it.

23 Thank you.

24 DR. JIM KENDALL: Next is Brent Helms,
25 followed by Richard Fineberg.

1 MR. BRENT HELMS: My name is Brent Helms.
2 I'm a lifelong Alaskan and have worked in construction in
3 the state throughout my career, many of those years in the
4 oil and gas industry. Since the development of Alaska's
5 oil and gas there have been thousands of workers trained
6 for building and maintaining the oil and gas
7 infrastructure. The jobs associated with this industry
8 has allowed me to remain in Alaska to raise my family,
9 along with many other Alaskans over the years. I'm
10 concerned this may change in the future if oil and gas
11 production continues to decline with the associated jobs.

12 The oil and gas industry demands a skilled
13 workforce to construct and maintain its pipelines and
14 facilities. These are trained Alaskans from across the
15 state, a skilled workforce ready to work on projects that
16 Alaska's OCS development would provide. Previous studies
17 estimate that opening the OCS for development will provide
18 tens of thousands of employment opportunities. These are
19 good jobs, jobs that allow young men and women to raise
20 families, support their communities, and remain in Alaska.

21 The oil and gas reserves of Alaska are crucial
22 to the nation and its dependence on foreign oil. Further
23 delays in permitting are costly and will deprive the
24 nation of both jobs and future domestic oil supply.
25 Developing the OCS is vital for Alaska's economic future.

1 I urge you to support permitting lease sale 193
2 for responsible development.

3 DR. JIM KENDALL: Richard Fineberg,
4 followed by Buzz Otis.

5 MR. RICHARD FINEBERG: Richard Fineberg,
6 3920 Old Wood Road, Ester, 99725. I have observed oil
7 operations for the better part of four decades as a
8 newspaper reporter, as a state bureaucrat, and as an
9 environmental advocate and as a consultant. I will go
10 back to -- and my comments are informed by, I think, all
11 of that work, primarily onshore, but some offshore. I was
12 with the governor's office in the Exxon Valdez spill and
13 observed it very closely throughout the summer of the
14 first year, and have just been down in the Gulf on my own
15 extensively, the Gulf of Mexico, which is not directly
16 relevant here, but I simply want to suggest I do have some
17 background to make a couple of general challenging
18 statements.

19 Number one, my first dealing with offshore spill
20 response was 1983 when I became the budget analyst for the
21 State's Department of Environmental Conservation in the
22 governor's office, and I had to move paper as a naive
23 bureaucrat who had no knowledge of how to do it, but the
24 first paper I had to move was to move the paperwork to get
25 funding for a stalled response project on oil spill

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1 response in broken ice.

2 The project had been stalled for some time. The
3 department was imploring me to move it. It's a perfect
4 metaphor for where we are right now. I don't know if we
5 have made any major progress. I don't believe we have
6 made significant response progress since -- since then.
7 At that time the State was botching its response. I have
8 observed over the years and documented the State's
9 response failures, and not only spill response, but
10 environmental protection responses, including the risk
11 assessment program of 2008 to 2010.

12 From that I just want to flag two -- two
13 sentences that just -- just popped out at me in your May
14 2011 revised supplemental report. Page 280, "The lack of
15 any well-established and extensive onshore infrastructure
16 within the Chukchi Sea region could compromise the
17 efficiency of response efforts, heightening and prolonging
18 the impacts described above." It doesn't sound like good
19 news at all. And I think the criteria that you asked us
20 to look at the statements is, are -- is the sentence
21 relevant, and what is your belief on it.

22 Yes, I feel it's quite relevant, but doesn't
23 demonstrate we should go forward. I believe not two pages
24 later, the conclusion -- and page 280, which you know --
25 not all of you here may know. That is a -- that is in

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1 response to a very large oil spill section.

2 The conclusion two pages later -- and I'll have
3 to paraphrase this. As a stutterer, that's the least I
4 can do for you. While intervention and response could
5 mitigate the volume and certain effects, the significant
6 and perhaps irrevocable adverse impacts associated with a
7 very large oil spill highlight the need for effective
8 spill response.

9 I spent that time stumbling over my biography
10 because I'm going to suggest a venture that I'm not clear
11 on, which is the precautionary principle. I believe these
12 two statements stand in almost flagrant violation of the
13 precautionary principle. Although my language is strong
14 there, I don't know that that's legally relevant, but
15 common sense wise it is a point I wanted to make. And I
16 am sorry that I do not have the legal background to know
17 if I'm on point for you on that.

18 So I thank you very much for your time.

19 DR. JIM KENDALL: Thank you very much,
20 Richard. Next is Buzz Otis and followed by Charles
21 Paskvan.

22 MR. BUZZ OTIS: Good evening. Good
23 evening. Thank you for being here. My name is Buzz Otis.
24 My mailing address is P.O. Box 55068, North Pole, Alaska
25 99705. And I welcome you to Fairbanks tonight. And I

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1 know we got precluded from the opportunity to testify
2 early on, so I appreciate you amending your schedule and
3 including us.

4 I represent North Pole Economic Development
5 Corporation. I'm their executive director as well as a
6 private businessman in this community since 1976. Lease
7 Sale 193 should be affirmed as held in 2008. I believe
8 the EIS provides sufficient information and analysis to
9 support an informed decision affirming sale 193.
10 Rescinding leases and allowing a de facto moratorium to
11 continue will harm Alaska's economy and discourage future
12 industry investment without a corresponding benefit to the
13 environment.

14 Alaska's economy is at a crossroads, as I see
15 the United States. We need to get a handle on this energy
16 issue. We are paying close to \$4 a gallon in this town
17 for heating oil. We heat our homes some people somewhere
18 eight, nine months of the year, but certainly six or
19 seven. We have snow on the ground from the first of
20 October, usually, until the first of May. And the people
21 on fixed incomes are leaving this town, retirees,
22 people -- it's difficult. You can sense it in the
23 streets. You don't see the activity in the construction
24 industry, at the restaurants. And it's a concern of mine.

25 I've decided to make Alaska my home, and I'd

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1 like to -- my children to be able to have jobs here. But
2 without adequate energy, affordable energy, they won't be
3 able to stay here. And the same concern goes for the
4 United States. We need to be dependent on Alaska's
5 resources as a country and not send our money to OPEC that
6 could care less. Those people do not like Americans, for
7 the most part, and it just seems absurd that we continue
8 to enhance their economy at the detriment of ours.

9 I'm as concerned about the Alaska environment as
10 anybody. I hunt here. I fish here. You know, we
11 recreate in the waters and love Alaska. But I truly
12 believe that development and industry and protecting the
13 State's natural bounty of fish, wildlife, waters, and the
14 way of life we have all come to love can be done jointly
15 and in harmony.

16 The Chukchi OCS is an important future source of
17 energy supply. I touched on that a little bit. I'm not
18 sure if the Chukchi Sea oil would come through the
19 Trans-Alaska Pipeline, but if it did, that would be very
20 helpful. Sorry about the echo.

21 We have two refineries in North Pole. When TAPS
22 first started in the '70s, oil was about 110 degrees. We
23 now get oil between 32 and 40 degrees into the refinery.
24 They use refined products to heat the oil so they can
25 refine it and that's the big -- that's the only reason

1 right now why the oil gets to Valdez is because it's
2 heated -- taken out of the pipe, a lot of it is heated up,
3 some of what they don't use gets put back in the pipe and
4 raises the ambient temperature of the oil in the pipe.

5 We are down from two million barrels a day to
6 600,000, and we need to get that oil back up to the levels
7 where it doesn't become ChapStick. We had an incident
8 last January when the line was shut down for seven whole
9 days because of a situation up at Pump 1, and it was
10 difficult getting it started.

11 So I see these type of developments being
12 beneficial, not only to Alaska, but the Trans-Alaska
13 Pipeline, our economy, the people of this state, both
14 Natives and those of us that weren't blessed enough to
15 have been born here, as well as the United States.

16 And so I urge you to move this thing forward.
17 The restrictions on development, the hurdles we have to
18 jump is -- is very, very difficult for industry to
19 stomach. Challenges putting a bridge across the river,
20 the Colville River, here on the Tanana. It just goes on
21 and on and on. And we are taking America down in the
22 process. There has got to be a balance between what's
23 good for the country and just saying no to -- to
24 further -- I'm not sure quite what the agenda is, but it's
25 time to change.

1 Thank you very much for your time.

2 DR. JIM KENDALL: Thank you, Buzz. Next,
3 Charles Paskvan. The floor is yours.

4 MR. CHARLES PASKVAN: I've worked
5 construction since 1975 on the oil pipeline. And I've
6 watched a lot of development go through that. I just have
7 a couple notes here I'd like to go over there. Is
8 releasing 30,000,000 barrels from our strategic national
9 reserve an energy policy? No. Alaska has for over 30
10 years and over 15,000,000,000 barrels of oil, that is an
11 energy policy.

12 In a new offshore oil field, the Oogarook, the
13 oil pipeline is inside of another pipeline. And what you
14 have there is the ability to have sensors. There is also
15 another couple of pipelines inside of that. So you have
16 the oil, gas, water, power inside of a half-inch pipeline
17 that protects the oil and gas and all of that inside of
18 that.

19 So after what he was talking about having the
20 island built out there for this development, and then you
21 have a buried pipeline that has sensors that would prevent
22 any release, you have zero possibility of an actual spill
23 from a pipeline with the new technology that they have
24 been using up there on this field now. So this company is
25 doing everything that they would need to to protect and

1 ensure any potential, and there would be zero potential of
2 a spill with this new technology.

3 What we are doing today is really amazing. And
4 we all know that with the knowledge we are doing it we can
5 do it right and do it safe in America for national
6 security, for Alaska's jobs, for -- we need to build it.

7 The other problem here is overregulation of the
8 entire industry, the entire country. We are being
9 regulated to death. I mean, we are doing it right, the
10 technology is there, and we just need to go out and do our
11 job.

12 Thank you.

13 DR. JIM KENDALL: Thank you very much.
14 Next is Merrick Peirce, followed by Jeanne Creamer-Dalton.

15 MR. MERRICK PEIRCE: Good evening. Thank
16 you very much for coming up to Fairbanks for this hearing.

17 My name is Merrick Peirce, P.O. Box 10045,
18 Fairbanks, Alaska 99710. I'm in the oil and gas business,
19 and I do support responsible oil and gas development. And
20 I think before I begin my testimony, I'd like a little
21 audience participation by a simple show of hands. How
22 many of you have been up to the Arctic coast ever in your
23 life, just a quick show of hands. So most of the people.
24 And how many of you have been up in the Arctic ice in the
25 wintertime? Let the record reflect about half the room of

1 a large group of Alaskans have actually been to the Arctic
2 in the wintertime.

3 One of the concerns that I have is that there
4 are many decisionmakers, both within industry and within
5 government who have never set foot on the Arctic sea ice
6 in the wintertime, so they don't fully appreciate just how
7 tough these Arctic conditions are, how cold it is up
8 there, how windy it is up there, and yet these are the
9 folks that are making decisions about what happens in
10 Alaska's Arctic.

11 This is an environment that's vastly different
12 than the Gulf of Mexico. According to a recent AP
13 investigation, there are 27,000 abandoned oil and gas
14 wells, and no one in industry or in government really
15 fully comprehends just what's happening with all the oil
16 and gas wells, particularly wells that have been
17 abandoned, thousands of them. And it begs the question of
18 why we are moving in the Arctic with all of the issues
19 that remain to be resolved in the Gulf of Mexico.

20 I think with the Gulf of Mexico it's helpful to
21 illustrate what's happening in the Gulf of Mexico to
22 what's happening in the Arctic. In the Gulf you have
23 thousands of miles of roads in the Gulf, and you have
24 airports, you have ports, you have a basic infrastructure
25 in place, but you access to the oil beaches if there is a

1 release of crude oil. And of course, you have got
2 year-round warm weather. You don't have the ice and the
3 wind like you have in the Arctic.

4 That's not the case in the Arctic. There are no
5 roads to the major communities in the Arctic. You can't
6 drive to Barrow. You can't drive to Kotzebue. You can't
7 drive to Kaktovik. What I'm asking you to fully
8 appreciate is that you can't even drive from Kaktovik to
9 Kotzebue. The road infrastructure just isn't in place.
10 And the nearest ice-free port is at Dutch Harbor. That's
11 roughly a thousand miles away from where this proposed
12 development will occur.

13 There is a real concern about the behavior of
14 the oil industry in Alaska over the last 20 years. So if
15 we can start with the corruption that we saw within MMS to
16 where officials abrogated their fiduciary obligation to
17 taxpayers where they were taking bribes, where they were
18 taking prostitutes, there were drugs, promises of jobs,
19 and they walked away from their fiduciary obligation to
20 the taxpayers.

21 In Alaska we saw what happened with Exxon in
22 Prince William Sound where they released between 11- and
23 20,000,000 barrels of crude oil into Prince William Sound.
24 Oil that's spilled there, today, you can simply kick over
25 the rocks on some of the beaches there. We saw that BP

1 ran their pipelines to failure in Prudhoe Bay. We had
2 Doyon Drilling with a convicted felon.

3 And what we have is a situation where we had
4 ADEC regulators who were told not to do the jobs that they
5 were responsible to do. And they were fired when they
6 did. And we have even had scores of representatives, both
7 representatives and senators who were taking bribes from
8 the oil industry. Huge concern.

9 And so the question that we have to ask with all
10 of this felonious conduct, this blatant corruption, how
11 can we have the slightest degree of assurance that history
12 will not repeat itself with oil exploration and
13 development in the Arctic Ocean? That's an unanswered
14 question.

15 But we can look at past behaviors to get some
16 indication of what future conduct is like. And the
17 possibility of cleaning up a major oil spill with sea ice,
18 darkness and storms is a fairy tale. As any Alaskan can
19 tell you, particularly in the cold winters, Murphy's law
20 prevails. If something can go wrong, it will go wrong and
21 it will go wrong at the worst possible time. So you'll be
22 looking for an oil spill, a major oil spill in the
23 darkness of an Arctic winter where you have got sea ice,
24 where you have gale force winds.

25 If you talk to the Eskimos up there, they'll

1 tell you about the gale force winds. And that puts a wind
2 chill up to about 60 to 100 degrees below zero.

3 The result is that you could have an uncontained
4 uncontrolled oil spill that spreads throughout the Arctic
5 doing enormous damage to wildlife and the subsistence way
6 of life of the Inupiat that have been practicing the
7 subsistence way of life for thousands of years. That's a
8 huge concern.

9 In the cold Arctic winters, the oil will not
10 break down quickly, similar to what we have seen in Prince
11 William Sound. And it will do damage for many, many
12 decades. And when the inevitable spill happens, people
13 are going to ask, what were they thinking back in 2011?
14 Why did they allow this kind of development to occur.

15 In closing, I note that offshore development is
16 outside of Alaska's legal jurisdiction. We will not
17 derive royalty or severance revenue from this kind of
18 exploration and development. That's what Alaska uses to
19 pay its bills. That's what we use for roads. That's what
20 we use for schools. That's what we use for troopers. And
21 we need to start filling that oil in the TAPS pipeline
22 that is in decline, and we can do that with
23 [indiscernible] exploration. And that oil does provide
24 the state with severance and royalty, not so with the
25 offshore oil.

1 So these are the concerns that we need to keep
2 in mind. And I thank you very much for having this
3 hearing and the opportunity to participate.

4 DR. JIM KENDALL: Next is Jeanne
5 Creamer-Dalton, and after that will be Garry Hutchison.

6 MS. JEANNE CREAMER-DALTON: Hello. My name
7 is Jeanne Creamer-Dalton. I'm at 176 Palace Circle, No. 5
8 in Fairbanks. I was born in Fairbanks. My family has
9 been here almost since the beginning of Fairbanks. And I
10 just am talking as just a regular citizen. I just wanted
11 to get my two cents in that I am opposed to this drilling
12 in the Arctic and the Chukchi. And I have been following
13 companies' actions for -- ever since I did spend six or
14 seven years in California and saw the impact on the
15 environment in Southern California. And when I came back
16 to Alaska, the pipeline was just beginning.

17 And the impact has not been all that great as
18 far as there have been a lot of oil spills. I have not
19 been -- my experience has been central Interior Alaska. I
20 did work on the pipeline for a number of years as a
21 Teamster and, actually, I was impressed with the oil
22 companies' actions at that time. But since then they have
23 deteriorated. I don't have any written comments. I'm a
24 better writer than a talker, and I'd like to submit
25 comments at a later date.

1 I just wanted you to know that I'm one of the
2 people that's adamantly opposed to the drilling as it
3 stands now. I don't believe they have the technology
4 needed to deal with any oil spills. And I think it would
5 be devastating to the planet. So thank you.

6 DR. JIM KENDALL: Thank you very much.
7 Garry Hutchison followed by Kirk Jackson.

8 MR. GARRY HUTCHISON: My name is Garry
9 Hutchison. I live at 140 Falcon Drive, Fairbanks 99712,
10 and I'm here to voice support for development of oil in
11 the offshore regions of the Chukchi Sea because of the
12 need for our pipeline that goes through this community to
13 provide a viable resource to the state and to this
14 community. Earlier we have heard about the decline and
15 you are aware of that, the Prudhoe Bay decline that's
16 increasing with each year. And there is a need to put new
17 oil in it. And my understanding is that the potential
18 exists for up to a million barrels a day to come from the
19 offshore. And we need to do that.

20 I lived in Fairbanks before the pipeline, so I
21 know what it was like, and I also understand the
22 tremendous, tremendous benefit that the oil discovery and
23 development and the pipeline has given to this community
24 and our state. Without a doubt, it's the greatest thing
25 that happened to the state since its inception.

1 And I think with that is an understanding of
2 how -- how devastating it would be to this community and
3 to the state if the pipeline no longer was able to
4 function and we lost its usefulness in the community. It
5 would hurt our tax base. It would hurt our public systems
6 and our revenues and jobs, and would be just as
7 devastating to this town and to this community as it was
8 good 30 years ago. So this is something that we need.

9 You know, we all can fantasize about fears, but
10 we can look back and see facts and reality. And the facts
11 are that this oil and this development has been tremendous
12 for this state, and we know that the country needs oil.
13 We know that we need to change the way that we develop
14 energies. We have the ability to do that through
15 technologies. Alaskans will not tolerate pollution. We
16 haven't, we won't. We love the land like no other people.

17 And so I very strongly hope that you support the
18 development efforts and allow that to go forward and give
19 the future to this state and this community. And I
20 appreciate very much you coming to Fairbanks. Thank you.

21 DR. JIM KENDALL: Thank you, Garry. Next
22 is Kirk Jackson, followed by Rita McGrath.

23 MR. KIRK JACKSON: Hello. My name is Kirk
24 Jackson. I live at 579 Wilcox, Fairbanks. I was born
25 here in Fairbanks, lived in Alaska my whole life. I want

1 to thank you for giving us the opportunity to speak today.

2 Alaska has enormous untapped oil and gas
3 potential, especially in its offshore areas. The Chukchi
4 Sea offers more resources than any other undeveloped U.S.
5 basin. Alaska's North Slope and its offshore areas are
6 now perhaps the most studied energy bases in the United
7 States. Over 250 studies have been funded in the Arctic
8 in the past decade with the majority focused on the
9 Beaufort and Chukchi Seas. The demand for energy is
10 continuing to rise, and reality will require continued
11 development of oil and gas resources.

12 At its peak, the TAPS pipeline carried
13 approximately 24 percent of domestic production. Due to
14 declining rates of oil production in the onshore North
15 Slope region, TAPS is down to a third of that production.
16 Development of OCS would help fill the pipeline and keep
17 TAPS flowing for generations to come.

18 So I urge you to move forward with the
19 development of the Lease Sale 193 at a time when America
20 needs jobs, economic growth, and a dependable supply for
21 affordable energy. Thank you for your time.

22 DR. JIM KENDALL: Next is Rita McGrath,
23 followed by Roger Burggraf. The floor is yours.

24 MS. RITA MCGRATH: My name is Rita
25 McGrath. I live -- POB 7334, Fairbanks. I'm a rather

1 newcomer. I've only lived here 33 years, as the
2 old-timers love to hear me say. I'm not a public speaker,
3 but I do want to give my opinion for the animals, for the
4 ocean, and the land. And say that we do not need this.
5 We do not need this to be open, sold, or however you want
6 to say it. We have got to get creative.

7 Oil is -- for the vehicles is something of
8 yesterday. We are getting into a new century, so we have
9 got new ideas. We have got to get creative. And the
10 three things we as human beings fight is greed, pride and
11 lust. And if we didn't have these resources, we would
12 have to get creative and think of other things to do. And
13 there are scientists out there doing that, and just
14 people. Look at the kids at UAF that are adventurers and
15 winning awards for the things that they are coming with
16 for electric cars and other vehicles.

17 So we can do that as far as the pipeline
18 selection -- the gentleman here said about the corruption
19 that's going on. I was bedridden this summer, so being
20 bored I watched Gavel to Gavel. And I was so appalled at
21 our government sitting there and wanting to give these oil
22 people tax breaks. Come on. If you guys pick up the
23 paper and look at the -- I don't play it, so I don't
24 know -- sorry. My nervousness is getting the best of me.

25 The market on the economy, look at the money

1 that they are making, billions and billions, and we are
2 giving them a tax break? Hello. Somebody is not home
3 upstairs.

4 And -- but he also said, you know, the
5 difference of the Gulf of Mexico versus Alaska, the snow
6 and everything, and we are digging in and drilling for the
7 effectiveness of the environment. I'm one of those
8 hippies from the old era which now i.e., tree huggers, and
9 close ANWR, close -- I can't pronounce it, this one that
10 we are arguing about now, and all of it.

11 Just keep it closed because you have got to
12 think of the future, people. You have got to think of
13 your children, the poor polar bears that they are trying
14 to say that they are extinct, and all the other animals
15 and the sea and the fish, the algae. All that has to be
16 put into consideration. Look at the money that they are
17 spending. You know how much money they are spending just
18 to look up about the ice worm? Have you all ever heard
19 about the research of that? You have got to think about
20 the poor little ice worm and the ocean.

21 Like I said, I'm not a public speaker, but I do
22 know and I do write my letters and I vote. And I was told
23 one time that I was an honest voter because I vote for the
24 person and not the party. So let's keep it closed, you
25 guys, and think of the future and let's get creative and

1 get other ideas about how to put the little cars into
2 effect and make them go. But we do not need to open this
3 up. We do not need that money. And like they said, the
4 corruption that goes on and all the back room stuff is not
5 necessary. Okay.

6 Thank you.

7 DR. JIM KENDALL: Roger followed by Greg
8 Egan, and then we are going to take a break.

9 MR. ROGER BURGGRAP: My name is Roger
10 Burggraf. I reside at 830 Sheep Creek Road, Fairbanks,
11 Alaska. And I would like to speak in support of the OCS
12 field proposal.

13 I -- for a little background information, I have
14 lived and worked in Alaska since 1953. I have worked in
15 the resource industries. I've worked for the U.S. Fish &
16 Wildlife Service in the early '50s. I also worked as an
17 advisor to the National Park Service. I have a very
18 strong feeling towards our environment and trying to
19 ensure that it is protected. However, I am a realist.
20 And I realize that if this state is going to grow and
21 people are going to have jobs, we have to develop our
22 resources in an environmentally sound manner.

23 And I support, you know, the testimony that Buzz
24 Otis gave previously and Garry Hutchison. We are at a
25 crossroads. I've also worked in the -- been in the Arctic

1 and am familiar with that. I've worked with bears --
2 around bears in my early years, too.

3 You know, the drilling that is proposed in the
4 Chukchi Sea is -- there are some very large companies
5 involved there, and they have very good reputations. They
6 know how to operate in the Arctic, and they have had good
7 records. Now, BP now has -- is going to work on a joint
8 venture in Russia, and there are many other oil companies
9 that are going to drill. So if you don't think they are
10 not going to drill in the Arctic, you have another guess
11 coming. And I'd rather see us drill on our land in an
12 environmentally sound manner. We do things right.

13 Now, maybe the Gulf Region there was some slack
14 on the part of regulators and not staying on top of
15 things, but I honestly feel that we need to go ahead and
16 see what resources we have. It will provide jobs. And
17 the drilling that will be done will be in shallow water.
18 And we have the technology today to do it and do it right.

19 We talked about jobs. That's important. If we
20 are going to live up here, you have all had to pay the
21 high fuel bills and, you know, a lot of the income that
22 the State receives is through the oil industry. Though on
23 the offshore drilling, the State would not receive a lot
24 of revenues that we are receiving now on State land.

25 The -- I feel it could be done right, and we

1 can, you know, develop it in a manner that is going to be
2 beneficial to all. And this area has been researched so
3 thoroughly and nothing is going to be done up there that
4 is not done right. And so I heartily request that we
5 consider this. I know there is a lot of emotion about
6 what's being proposed, but I have confidence in U.S.
7 technology to do things right.

8 And with Shell Oil, you know, I am appalled at
9 the fact that they have -- they spent 2.5 billion dollars
10 for the leases and they have been held off, and they now
11 have, I think, about 4.5 billion dollars invested in
12 trying to be able to drill. And there have been a lot of
13 other companies that have drilled offshore in Alaska, and
14 we have not had problems there.

15 So thank you very much for your time, and I
16 appreciate everybody coming out, as well as you folks
17 coming out here.

18 DR. JIM KENDALL: Thank you, Roger. The
19 last speaker before the break is Greg Egan. And after the
20 ten-minute break it's going to be Pam Miller and Tim
21 Sharp. So we are going to start promptly after the ten
22 minutes.

23 MR. GREG EGAN: Hi. My name is Greg Egan.
24 I live at 981 Gold Mine Trail here in Fairbanks. My main
25 point is that -- okay. I get nervous up here, so bear

1 with me. There are safer places to drill for oil. Okay.
2 If you are going to do something, you -- you know, if I
3 had the caribou in my bedroom, I'd do it, okay. But it's
4 not the cleanest, neatest place to do it. It's probably
5 going to come back to haunt you if you do something stupid
6 like -- you know, you just don't want to -- you know, why
7 make work for yourself? You know there is going to be
8 problems in the future. Why not just be smart and try
9 to -- you know, we need this oil development, fine, but
10 let's do it the smartest way we can. We know that we are
11 human. We know that things happen, and we know that, you
12 know, sometimes we have to go back.

13 We -- the best of intentions, the smartest
14 engineers built the -- the walls that were to keep the
15 tsunami waves out of Japan, and they built them higher
16 than they thought the waters were ever going to go. Well,
17 the ground dropped 20 feet underneath their walls. Nobody
18 knew that was going to happen. And the rest of it is
19 history, right?

20 So my point is, there are just safer places to
21 do it. If you do it on land, if you have to have the oil,
22 great, just do it the safest way possible. You don't want
23 to do it someplace where if you have a spill, you're not
24 going to be able to clean it up, you're going to cause all
25 kinds of wreckage and devastation in the area. It just

1 doesn't make sense. Okay.

2 And as far as like -- jobs are important. You
3 know, I have been working -- either looking for a job or
4 working for the last, you know, 40 years. And I
5 understand that they are important. I understand our
6 families are important. Our families want things. We all
7 want things. We have got to have jobs. But you know, if
8 you think about it, okay --

9 Just imagine you were a farrier, you made
10 horseshoes -- and this was around the turn of the
11 century -- and you see the first car go by; what are you
12 thinking? Okay. You are thinking, well, I can stand in
13 the road and shake my fist at the car and say why don't
14 you bozos come in my shop and buy more horseshoes, or I
15 can, like, maybe get with the program and try to do
16 something that's going to ensure that I'm going to have a
17 job and I'm going to be able to support my family in the
18 future. Okay.

19 So the smart one is probably knocking on Henry
20 Ford's door trying to get a job, saying, hey, I can bang
21 on iron, I can work with steel, I can do things that are
22 going to help your business. Now, people who work on a
23 pipeline -- wind turbines need towers. Power systems need
24 transmission lines. Solar panels need racking. They need
25 people who can wire them. They need people who can do the

1 dirt work to, you know -- for a solar farm or dirt work
2 for roads to join, you know, the pads for wind turbines.

3 We have a lot of resources. Oil isn't our only
4 resource. And don't kid yourself; even if you have been
5 welding pipe for 30 years, don't kid yourself that you
6 can't do something else as good or better as the next guy.
7 I mean, you know, I've got -- I know people, especially
8 Alaskan workers, are very resourceful and they can learn
9 just as good or better as anybody out there.

10 And so I think we just need to, you know -- some
11 of us may need to change our jobs, you know, just in the
12 future. And I think that that's important to just
13 understand that and keep your eyes wide open. And if
14 there is an opportunity you need to jump on or there's
15 something else you need to learn, you know, you don't want
16 to be the last guy working at a place before they turn the
17 lights off.

18 So that's all I've got to say. Thank you very
19 much for listening. Thank you for your time. And I wish
20 you all the best. I'm glad to see people come out.
21 Whatever their opinion, I'm glad to hear to it. Thank
22 you.

23 DR. JIM KENDALL: Thank you, Greg. Okay.
24 We are going to take a ten-minute break. Right after the
25 break, we're going to start with Pam Miller and Tim Sharp.

1 So I'm kind of the school mom here, so in ten minutes I'm
2 starting. See you back.

3 (A break was taken.)

4 DR. JIM KENDALL: If you want to take your
5 seat, we are going to get started in about ten seconds. I
6 want everybody to have a chance to speak, but I also know
7 a lot of you don't want to spend all night here. So next
8 in line is Pam Miller, followed by Tim Sharp. Pam.

9 MS. PAM MILLER: Thank you for this
10 opportunity. My name is Pam Miller. My address is P.O.
11 Box 82803, Fairbanks 99708. Welcome, Dr. Kendall and the
12 rest of you, to Fairbanks. We appreciate this chance to
13 speak about this important issue, the future of the Arctic
14 Ocean and its living ecosystem.

15 Here in Fairbanks our community does have a
16 stake in this issue, and our community is tied to the
17 oceans by the Pacific salmon that run up the Yukon River
18 to the Tanana where people have fished for at least 11,500
19 years. Resilient Alaskans have made a living on this land
20 for a phenomenal length of time. We're connected by
21 migratory birds that fly across Creamer's Field that end
22 up nesting in the Arctic and then feed and molt and do
23 other things on the shoreline of the coastal -- of the
24 Chukchi Sea, as well as elsewhere in the Arctic.

25 Like many Americans, we care about these

1 resources that belong to all of us, the diversity of
2 wildlife that depends on the productive Chukchi Sea
3 waters, from the whales to the seals to the polar bears.

4 Just across town, our University of Alaska
5 Fairbanks has been here for a long time, and it's educated
6 Alaskans with creativity, ingenuity to make productive
7 lives in our community, and that will remain.

8 One friend of mine at a hearing one time said
9 the most important development is between our two ears.
10 And we are -- we have a lot of potential here to figure
11 out how we are going to have a sustainable future with
12 energy.

13 The University of Alaska Fairbanks has also made
14 major scientific contributions to the knowledge about the
15 marine ecosystem and also that the Arctic serves as the
16 air conditioner to the world, that it's affecting -- the
17 Arctic is affecting the climate -- that global warming is
18 affecting the climate and the oceans on a global scale,
19 and that the melting sea ice is occurring from the most
20 rapid warming in the world. This has produced great
21 uncertainty and complication to the factor of doing the
22 environmental impacts in this document.

23 During this process, it's important to remember
24 and not have national or even local amnesia that a major
25 disaster happened in the Gulf of Mexico and we have a lot

1 of lessons to learn, both how to deal with cleaning up
2 oil, as well as having adequate knowledge about the
3 ecosystem that is at stake. That's why we are here today,
4 because of failures of the federal government, not just
5 once, but three times, to provide adequate environmental
6 analysis, good science about the impacts of offshore
7 development based on baseline information that's adequate
8 to actually make those assessments.

9 There is also a failure of common sense to apply
10 the risks of major spills to the decision at hand. Even
11 though this time in the document there has been an
12 acknowledgment that significant impacts would occur from a
13 blowout, a very large oil spill, but the decisions have
14 not changed.

15 This lack of an adequate scientific underpinning
16 of the decision to lease the Chukchi Sea and, in fact,
17 common sense about the daunting risks of an oil spill, my
18 organization, who I'm representing here today, the
19 Northern Alaska Environmental Center, made the tough
20 decision to join with the Native Village of Point Hope and
21 other Alaska Native communities and conservation groups to
22 challenge the adequacy of the original document and other
23 risky Arctic Ocean drilling. This is not a decision we
24 take lightly.

25 This process is a hard-won step in light of the

1 poor and rushed process that went forward in the Bush
2 Administration that was found to be legally deficient.

3 The stakes are high with the chances of a major
4 spill from 25 to 54 percent from the drill platforms or
5 pipelines as a result of the Chukchi Sea Lease Sale 193.
6 That was in the original document. But in the first
7 document the impacts of blowout spills were not analyzed.
8 The -- the original EIS said "we consider blowouts to be
9 unlikely events," and the government felt they did not
10 need to analyze those impacts. The second draft, which
11 took place after the Gulf of Mexico spill, also decided
12 that they did not need to analyze the impacts of a very
13 large oil spill.

14 So finally we have a document that does say,
15 yes, there is a very large -- there is a chance that we
16 will have a very large oil spill and that we will have
17 significant impacts to bowhead whales, to migratory birds,
18 to polar bears, to the subsistence of communities who live
19 along the coast.

20 There is still not proven technology to clean up
21 oil spills. And I was lucky enough to be invited to
22 participate in one of the spill drills in 1999 and 2000
23 that Alaska Department of Environmental Conservation
24 required when the very first truly offshore field was
25 developed at Northstar.

1 And it was sobering to be out on the ship and to
2 go through the various procedures for the equipment that
3 the plan had, whether it's booming, sending out a barge
4 that's going to collect the oil in October. It couldn't
5 get out of the dock. With very small percentages of ice
6 in the water, the booms broke, popcorn went out, the kind
7 of skimmer they were going to use to clean it up, it got
8 mere kernels. That was just a simulated spill. There's
9 been no real testing, field testing in the Chukchi Sea and
10 no field tests of the kinds of equipment that are proposed
11 for using today in the proposed drilling.

12 Furthermore, this process, which seems long, is
13 actually short because -- I didn't bring my copy of the
14 document up here, but 98 pages of this new, thick
15 environmental impact statement is justification why none
16 of the data gaps that were identified in earlier rounds of
17 the process where there was inadequate baseline science --
18 none of them have been addressed, short of the worst-case
19 spill scenario and the impacts to fish from that kind of
20 spill.

21 So there has been a statement that these are the
22 data gaps. We don't have adequate baseline information.
23 If there was a spill tomorrow, we couldn't say what was
24 harmed in any level of detail. We know that great
25 resources are at stake. We do know that the Arctic Ocean

1 is an integral part of life in Arctic coastal communities,
2 that it supports wildlife species, that it helps regulate
3 the planet, and it's changing rapidly. However, there is
4 very little information about how the Arctic Ocean
5 functions today or the ways in which this fragile Arctic
6 ecosystem might respond to industrial activities.

7 Our university was very involved 30 years ago in
8 a very good program with the OCSEP program, which was an
9 environmental studies program. It was oceans wide on the
10 Beaufort and Chukchi. It looked at everything from ice
11 algae, plankton, birds, looked at how the relationships
12 were within the ecosystem. So much has changed. And
13 nothing like that is in place today.

14 Just today, the U.S. Geological Survey, an
15 agency of the Interior Department, released a big study
16 called an evaluation of the science needed to inform
17 decisions on OCS energy development in the Chukchi and
18 Beaufort Seas. There is no recognition that that study
19 was under way. The Interior Department could have waited
20 to put out this document and incorporate the findings from
21 what the USGS said were necessary information upon which
22 to make these recommendations for the future of the Arctic
23 Ocean.

24 What I did notice in reading very briefly some
25 conclusions of the report that came out today, it said the

1 effects of climate change are anticipated to influence all
2 components of the Arctic ecosystem, and Arctic OCS energy
3 activities may exacerbate these changes unless careful
4 analysis of risks and tradeoffs is conducted. That is the
5 kind of decision that we are faced with today.

6 The USGS also noted that -- well, first off,
7 mentioned -- people think when the Arctic Ocean was ice
8 free that it's going to be like a bathtub, that it's going
9 to be just calm water. Well, nothing could be farther
10 from the truth. We have weird weather. We have
11 unpredictable weather. And what the USGS said about this
12 is that although portions of the Beaufort and Chukchi Seas
13 are expected to be ice free for a greater period of time
14 each year, the pack ice is predicted to be much more
15 dynamic at certain times, increasing the risk of accidents
16 and making oil spill response more difficult during these
17 times.

18 I got an e-mail this morning from a friend in
19 Barrow who knew I was coming to the hearing, and he said
20 that the whole coastal zone is maxed out with ice. It had
21 phenomenal currents and winds that have shoved this broken
22 ice right up to shore. They can't get out into the ocean
23 from Barrow. And it's a big factor. It's a big change.
24 And so that nature of the ice is -- I'm humbled by what
25 I've seen in the ice, what I've seen on the satellite

1 images of looking at the Chukchi Sea. Every day those
2 leads are changing. The ice is changing. And the risks
3 and how that translates to how operations would take place
4 have not been addressed in these documents.

5 So our community here in Fairbanks is also tied
6 to the people not only in our area who depend upon the
7 land, but people who live in the Arctic. We are
8 economically connected to them. We are socially connected
9 to them. And we offer great opportunities in both
10 directions for living a wonderful life here in Alaska.

11 So in conclusion, before the Interior Department
12 considers any drilling in the Arctic Ocean, including
13 Shell's proposal to drill ten wells in the next two years
14 in the Beaufort and Chukchi Sea, the impacts from a
15 blowout spill must be analyzed. That worst-case spill
16 scenario needs to be addressed, and until the issues, such
17 as the lack of comprehensive science and the inability to
18 clean up an oil spill in Arctic waters, are proven, the
19 federal government cannot make informed decisions about
20 leasing in this remarkable area of the Chukchi Sea.

21 Thank you very much.

22 DR. JIM KENDALL: Tim Sharp, you have the
23 floor.

24 MR. TIM SHARP: Good evening. My name is
25 Tim Sharp. I'm the business manager of the Alaska

1 District Council of Laborers, representing about 5,000
2 Alaskan workers, construction mainly; also infrastructure
3 and maintenance. We also work geothermal weatherization
4 and green energy jobs.

5 I'm going to go ahead and address something I
6 heard earlier about the comparison to Ford. Even though
7 we are very supportive of alternative energy, if my
8 members were having to depend on geothermal or
9 weatherization or green energy jobs that might be here
10 someday, they would have lost their houses, they would
11 have moved out of the community, they would given back to
12 the bank all that they were able to give back to the bank.
13 It is an idea whose time may come at some point.

14 I heard the bigger picture mentioned here
15 tonight. The bigger picture is that if every ounce of our
16 potential of our political will was dedicated to
17 alternative energies, we still would need the fossil fuels
18 to keep us going, to not collapse as a nation.

19 So even though we are supportive of alternative
20 energies looking towards the future, we live and make our
21 payments in today's world. That's reality for Alaskans.
22 Moose meat and beans, if you have got it, but day to day
23 we have to make a way to make our bills and support our
24 families.

25 I'm not here to speak for the polar bears. I'll

1 let the scientists do that. I will not speak for the
2 Inupiat people or Inuit because they have traditional IRA
3 councils that will do that for them and do it very well.
4 I did talk to one of the groups tonight. He gave me a
5 sticker about protect the Arctic Ocean. We, as a district
6 council, are fully in agreement. We want to protect the
7 ocean. We just don't want to shut down the ocean.

8 For us and the people that I represent, actually
9 workers -- and I represent workers -- we are looking for
10 jobs, good-paying jobs to support our families, that
11 deliver benefits on top of those so we can retire with
12 dignity; medical benefits so we can take our families to
13 the doctor and realistic medical care. At the end of the
14 day, that's really what it's all about for us.

15 At the same time, in being what some would
16 buttonhole us as pro development, we support the
17 development as sustainable development with the strongest
18 environmental engineering possible that's on the market
19 today. So I think we are -- we are having a foot in both
20 camps.

21 We understand the environmental concerns, but we
22 live in today's world. And in today's world, people are
23 moving out of Fairbanks, Alaska because of the cost of
24 energy. That has to be addressed. And one way you
25 address that is to open up, at least with strong

1 restrictions, that which Shell has been spending millions
2 of dollars for every month to have a right to sit on.
3 They need to have a reasonable return on their investment
4 or, like others have stated before, the industry goes
5 away, the very industry that pays 80 percent of the bills
6 in the state of Alaska for some of those other things that
7 people take maybe for granted. I would maybe suggest that
8 we might not want to take those for granted.

9 I look at it also from our world neighbors'
10 perspective. When you are looking at anywhere from \$6 to
11 \$10 per gallon of gas in the villages, you are seeing a
12 migration from a lot of people that can't even afford
13 subsistence hunting anymore. A snow-go, a boat motor,
14 heating oil for your house, all those things are causing
15 problems throughout the state.

16 So I guess I would like to speak very strongly
17 in support of the affirmation of the original lease 193.
18 We tried, like I say, to look at all sides. At the end of
19 the day, we can look to the future, and I believe we
20 should, with alternative energies; but we still have to
21 make house payments this month. And people are impacted
22 here in this city, in this whole central region of Alaska,
23 and it's detrimental. It's only going to get worse until
24 we do something.

25 Studying it to death longer is not going to be

1 the answer. It has been studied. Delaying it longer is
2 fruitless at this point. I mean, it's just a waste of all
3 of our times. We know what needs to be done. So we would
4 support the original lease reaffirmation. Thank you.

5 DR. JIM KENDALL: Thank you. Sam Wohns,
6 followed by Lucas Frances.

7 MR. SAM WOHNES: Thank you. My name is Sam
8 Wohns, 4041 Mallard Way, 99709, Fairbanks. I'm -- I'll
9 keep my comments brief. I'm a 20-year-old student, so I
10 come -- I look at this issue with the perspective of
11 knowing that I'll be looking for a job in several years.
12 And the type of job that I want certainly won't be one in
13 an industry whose future is limited.

14 I think that, you know, there has been a lot of
15 talk about jobs tonight. I think we need -- we need some
16 that are going to be sustainable in the long term, and
17 that comes from the renewable energy sector, not oil and
18 gas. That's what makes this country great, its ability to
19 innovate and operate at the vanguards of science and
20 technology, not continue down the same path that will lead
21 us to a state of mediocrity versus continuing to lead the
22 world in its economic power.

23 And I also want to point out an issue considered
24 but not analyzed in the draft supplemental EIS, the
25 greenhouse gas emissions from consumption of produced

1 natural gas. I've read the reasons that that issue is not
2 further analyzed, but I still think it's important to
3 consider the fact that increased production and increased
4 supply of oil and gas has some sort of connection with the
5 detrimental effects of greenhouse gas emissions. And I
6 don't think that you can see those as separate and
7 independent from one another.

8 So I would strongly urge the no-action
9 alternative two listed in the draft statement. And I
10 thank you for your time.

11 DR. JIM KENDALL: Thank you, Sam. Next is
12 Lucas Frances, followed by Katherine Schake.

13 MR. LUCAS FRANCES: Thank you. My name is
14 Lucas Frances. I don't live here in Fairbanks. I live in
15 Anchorage. And I want to thank you all for allowing me
16 the opportunity to speak tonight. Full disclosure, I do
17 work for Shell, and I'm coming out tonight really to give
18 my opinion because Shell is going to be submitting their
19 own written comments by the 11th.

20 And I wanted to come up here and thank everyone
21 for coming out. It's important to hear both sides of
22 this, and your opinions are well worth sharing the time on
23 the floor.

24 I want to just maybe throw out a couple points
25 from the perspective of where this very large oil spill

1 might relate to the conversations tonight. One of -- one
2 of the points I'd like to just relay is that this is a
3 hypothetical very large oil spill. In fact, the locations
4 that are laid out in this draft SEIS are actual locations
5 Shell is not drilling in 2012 or '13.

6 But beyond that, I think it's important to keep
7 in perspective the amount of time, the amount of input and
8 energy and thoughts that have come to get this program to
9 where it is today. And I want to thank all the input that
10 we have received from the community, from BOEMRE, also,
11 for those hearings.

12 Beyond that, maybe I can touch on some of the
13 jobs. And from that point of view, we have worked here
14 regionally. We have strived to attain that local content,
15 but the public support from the community can only come
16 from the impact that it can make to the community. But we
17 also reached out to the University of Alaska Anchorage and
18 asked for a study to look into the potential economic
19 impacts to the state of Alaska. And I think many have
20 seen that study that came out a couple years back.

21 And it talked about the 35,000 jobs that would
22 derive to the state of Alaska directly. And that seems
23 like a large number and it's a yearly average over a
24 50-year timeline. So to the comment that this would be a
25 flash in the pan, if you will, these are multigenerational

1 job opportunities that would come from the potential
2 development of the OCS. And USGS has looked at those
3 numbers and they have, I think, a conservative number. At
4 least our internal auditors look at it, and they think
5 there is a lot of opportunity there. But tens of billions
6 of barrels.

7 But more than that, I think it's looking at the
8 broader context of how it relates to TAPS, how it related
9 to how our communities interact; really, the importance
10 that Alaska plays in its impact to the country at large.
11 And I'd like to see Alaska continue to play that role.
12 And I want to continue to live in Alaska because I love it
13 here.

14 So that's all I have to say. Thank you.

15 DR. JIM KENDALL: Thank you, Lucas. Next
16 we have Katherine and then Randy Griffin.

17 MS. KATHERINE SCHAKE: Hello. My name is
18 Katherine Schake, and I'm a seasonal worker up in Alaska,
19 and I have been working up here for six years. And I just
20 wanted to bring out the perspective that it seems like
21 both sides are speaking out of fear, and both sides have
22 legitimate fears. And I think about all of the energy and
23 the time and the effort that's been put into the sale, and
24 the lease sales and the research involved in trying to do
25 this in a safe way. And the fact is that no matter how

1 good the technology is, it still will fail at some point.

2 I work with the latest laser technology on a
3 daily basis, and it's amazing when it works well, and most
4 of the time it doesn't work well. And it just takes one
5 software glitch. It just takes one person not being
6 trained correctly. I mean, the point is, it's not 100
7 percent foolproof, so it's a matter of people losing jobs
8 immediately or the potential of people who live in the
9 north losing their food resources, losing their way of
10 life.

11 So I would encourage all of you, rather than
12 spending time trying to make a decision where somebody
13 loses out or has the potential of losing out, to find an
14 alternative solution. And I realize that's scary because
15 it involves job loss or temporary job loss, but we are
16 creative as people. And when we are forced to do things,
17 it's amazing what we can do. So it would be great if
18 neither group had to lose in this situation. That's all.

19 DR. JIM KENDALL: Thank you, Katherine.
20 Next we have got Randy Griffin, followed by Jay
21 Quakenbush.

22 MR. RANDY GRIFFIN: My name is Randy
23 Griffin, Post Office Box 73653, Fairbanks, Alaska. I want
24 to thank the group here for doing their revised draft
25 supplemental environmental impact statement. It looks

1 like you have done a very thorough job, particularly
2 adding the very large oil spill, as opposed to the
3 worst-case scenario oil spill. That's an interesting
4 distinction I hadn't thought about. It's good to think
5 about all those things, of course.

6 I'm in favor of drilling in the offshore
7 continental shelf, OCS, mainly to keep the pipeline full,
8 to keep our economy going, to keep the Permanent Fund and
9 its concept alive since that's where all the money for the
10 Permanent Fund came from is oil development.

11 I know an earlier speaker talked about why not
12 drill in the safest place, and he gave a good example
13 about cutting up caribou in your bedroom. Why do it
14 there? There's still blood in the carpet and nasty smell.
15 Why not do it in the garage. That's a good point. If you
16 don't have a garage, why don't you do it outside. I
17 suppose if you were stopped because you didn't have a
18 garage and you tried to do it outside, but some
19 environmental group said that you are wrecking their view
20 shed by doing all that nasty chopping up, you might have
21 to do it in your bedroom, better there than not having the
22 food.

23 I suppose if we ask the left wing groups, would
24 you allow us to do it onshore in ANWR, I'm sure they would
25 give a hearty venting to that. No deal, I'm sure they

1 would say. So the prospects are good on the -- in the OCS
2 area and so that's an economic question. Let's see. The
3 Gulf oil spill, that was a horrible thing, horrible to
4 watch it on TV, go day after day, week after week, several
5 months pouring into the Gulf. Of course, that was way
6 down there, a mile plus or two miles, or whatever it was;
7 way the heck down there.

8 This is -- the OCS is a very shallow area. And
9 so -- but it -- every time we go through a disaster like
10 that, I think in the North Sea in the North Atlantic they
11 had a big oil spill, I think, some decades ago or a
12 platform blew up or whatever. And people learned --
13 people learned -- we, civilization, learned from that, and
14 that's what civilization is all about, trying and learning
15 and proceeding and getting better and better. I think
16 things just get safer and safer, as long as our endeavor
17 is not absolutely catastrophic. I think there is no good
18 reason not to venture forth while keeping safety at the
19 highest level.

20 I one time read a science fiction magazine where
21 they colonized the moon, and some company developed a
22 device that could capture a little bit of earth's
23 atmosphere, changing it to radio waves, even to the moon
24 to give them a little bit of atmosphere while just
25 diminishing the earth's atmosphere a little bit.

1 Unfortunately, something went wrong where they
2 had this machine way out in the wilderness, and the
3 shutoff didn't go off, and it kept sucking away earth's
4 atmosphere. And when they tried to send an airplane to
5 shut the thing off, the atmosphere was so thin they
6 couldn't fly and it eventually sucked the whole earth's
7 atmosphere and destroyed it; but the moon was okay.

8 That's an example of a catastrophic thing that
9 you don't want to go there now, but even in oil even in
10 the Gulf of Alaska, as horrific as that was, I would not
11 suggest that we shut down or not venture forth in the Gulf
12 of Mexico [sic] because we will live and shrimp will come
13 back and things will go on.

14 It would certainly be bad in the Arctic because
15 of ice and the oil doesn't evaporate as well. So by all
16 means, the people should figure out what would they do;
17 where would they get their supplies? Do they need
18 submarines to go under the ice to crimp off the well if
19 the blowout preventer or whatever failed totally. I mean,
20 it's one in a million, but things happen; Murphy's Law, I
21 guess.

22 Anyway, I used to work up at ARCO up at Kuparuk
23 for 11 years at ARCO as an oil field operator, and I am
24 appreciative of all the effort they go to. Mistakes
25 happen, but civilization must go on and our economy needs

1 to not die. Thank you.

2 DR. JIM KENDALL: Thank you, Randy. Next,
3 Jay Quakenbush, followed by John Plutt.

4 MR. JAY QUAKENBUSH: Jay Quakenbush, 1593
5 Scenic Loop, Fairbanks. I'm a 53-year lifelong Alaskan,
6 and I want to thank you for coming and listening to
7 everyone's opinion. My opinion is I view the world --
8 even though I'm a hometown boy, I hope to always keep an
9 open mind and to see our issues here in Alaska and how it
10 affects our entire world because it gets smaller and
11 smaller every day.

12 And as Mr. Burggraf mentioned, what I would like
13 to see as far as the offshore development is controlled
14 and regulated by the people of the United States of
15 America versus the very few controls that I have read
16 about and heard about from some of the other countries of
17 the world that don't have an opportunity like this for
18 Americans to come out and speak. They will be thrown in
19 jail if they oppose development or if they suggest
20 realistic environmental protection laws which we do here
21 in Alaska.

22 I've worked on the North Slope a little bit. I
23 currently represent about 5,000 electrical workers in the
24 state of Alaska through the International Brotherhood of
25 Electrical Workers.

1 We would love to build power lines all over
2 Alaska. That's what part of our union membership does,
3 but it doesn't no good to build a power line if you don't
4 have people to use that power. And so we realize there is
5 a need for other industries, not just the generation of
6 electricity, but industries that will bring people and
7 keep people in Alaska so some of our members can work and,
8 as Tim said, provide good wages and benefits for their
9 families and put food on their table.

10 So I urge the movement of this sale to go
11 forward, but I also urge many of the environmental
12 protection issues to be brought to light so our
13 environment is protected. I've had the -- the great
14 privilege to not only work on the North Slope and along
15 some of the coast in the Chukchi Sea, but to hunt and fish
16 up there, as well, and all over Alaska, and I hope to
17 continue that.

18 I want to see our environment protected, but --
19 and I'd like to take my family with me. And as they have
20 gotten a little bit older, they are searching for
21 opportunities to make a living in this state and stay in
22 this state. I've already seen my grandkids and daughter
23 and husband move to Anchorage because it's a cheaper place
24 to live as far as energy goes. It makes me pretty sad.

25 And I'm hoping things like the offshore drilling

1 opportunities will possibly not only bring my grandkids
2 back, but keep other people's grandkids and family here in
3 Fairbanks and see our economy grow soundly here in
4 Fairbanks because it is getting harder and harder.

5 I've got a good job. My wife has a good job.
6 But I see more and more people every day not have a
7 good-paying job. Some of the jobs that are produced on
8 the North Slope -- I might as well say it now. I hope
9 when and if this sale goes through, that Shell and any
10 other company that has an opportunity to drill up there
11 looks at people in this room, talk to Tim Sharp or anybody
12 down at the unemployment office, and hires Alaskans
13 because we will help you protect our Arctic Ocean, our
14 shoreline, and our fish and polar bears. People that
15 don't have a stake in our land may not.

16 So I would urge you to put that in your study
17 that Alaskans be hired during the drilling and the process
18 of bringing that oil to shore or on tankers, or however
19 that's proposed. It's Alaskans that are doing that work.

20 Thank you again for your time.

21 DR. JIM KENDALL: Thank you, Jay. Next is
22 John Plutt, followed by Jessica LeClair.

23 MR. JOHN PLUTT: Thank you for the
24 opportunity to comment today. My name is John Plutt, and
25 I have lived in Fairbanks for almost 50 years. I have

1 worked in the construction industry for about 30 years.
2 And a lot of that work was -- many years were on the North
3 Slope.

4 Lease Sale 193 is a very important component to
5 help spur our economy and provide Alaskans with
6 good-paying jobs. The ongoing delay in Alaska OCS
7 development is a concern not only to me and Alaska, but
8 also on the national level as well. Cost of living in
9 Alaska is not going down, and I believe we must promote
10 more oil and gas development in our state. Every year the
11 EPA issues useable permits across the country, but when it
12 comes to Alaska, the time frame in which permits are
13 issued are drastically increased. This is unacceptable
14 and we need prompt action to help move Alaska forward.

15 OCS production will help bolster TAPS, which is
16 now operating at about one-third capacity. Alaska needs
17 to move forward at a faster pace and increase development
18 of our oil and gas resources. This development will
19 create good-paying jobs for Alaskans who live here and
20 want to remain in Alaska.

21 Again, OCS is vital to economic prosperity, and
22 I urge you to support permit lease 193 for responsible
23 development. Thank you.

24 DR. JIM KENDALL: Thank you, John.
25 Jessica, followed by Jim Laiti. The floor is yours.

1 MS. LECLAIR: Good evening. Is this okay?
2 Thank you for the opportunity to speak this evening. Our
3 discussions tonight would not be complete if we didn't
4 talk about why we were actually here. The Arctic is
5 opening up to petroleum exploration efforts undoubtedly
6 because of global climate change. Rising temperatures
7 have given the perception that the Arctic region is a more
8 hospitable -- is more hospitable to drilling operations.
9 Significant reductions in sea ice cover are tantalizingly
10 exposing possible petroleum resources in the circumpolar
11 north.

12 In a sense, here tonight at least, it seems that
13 global climate change, caused by the combustion of fossil
14 fuels, is bringing about opportunity, though I would like
15 to stress that this is a temporary opportunity, at best.

16 At what cost are we willing to go after this
17 opportunity? Along with the reduction in sea ice, climate
18 change is bringing about many other changes to our global
19 system. Along with the long-term changes to ecosystems,
20 the warming climate is marked by increased occurrences of
21 extreme weather events, and these events cause serious
22 loss of life and property, along with longstanding
23 regional impacts that are challenging to overcome.

24 The National Climatic Data Center of the
25 National Oceanic and Atmospheric Administration reports

1 that since 1980 there have been over 725 billion dollars
2 in damages accrued from weather-related disasters. And as
3 stated by the Intergovernmental Panel on Climate Change, a
4 consortium of scientists around the globe, weather-related
5 disasters are certainly on the rise. We can see this in
6 the news every single day.

7 We are all sitting in this room because of
8 climate change. We cannot disagree that this is not
9 happening. You are proposing to drill because the Arctic
10 waters are finally opening up somewhat to allow rigs. We
11 cannot merely look at what, at least to the petroleum
12 industry, seems beneficial, but we must also see the
13 negative impacts of climate change.

14 Increased extreme weather events are just one
15 drop in the bucket of impacts associated with global
16 climate change. Others include ocean acidification which
17 kills once bountiful marine habitats; changes to the
18 hydrologic cycle resulting from increased floods and
19 droughts; significant alteration of species distribution
20 and health; the melting of permafrost, which undermines
21 valuable built infrastructure, some of which are needed
22 for this project, like the road systems and the
23 Trans-Alaska Pipeline. And the list goes on from there.

24 Perhaps the perverse decision to use the impacts
25 of rampant fossil fuel use as a way to increase production

1 of the very source of the problem should be reconsidered,
2 or at least more thought out. A report released today by
3 the USGS states the need for developing a better
4 understanding of the effects of climate change on
5 physical, biological, and social conditions, as well as
6 resource management strategies in the Arctic. Once
7 completed, these should be included in this environmental
8 impact statement.

9 Further, the impact of greenhouse emissions
10 resulting from the consequence of Lease Sale 193 --
11 Further, the impacts of greenhouse gas emissions resulting
12 from the 1,000,000 barrels of oil and 2.25 trillion cubic
13 feet of natural gas forecasted to be produced as a
14 consequence of Lease Sale 193 should also be included in
15 this document.

16 In addition, proof of adequate spill response
17 measures must be included in the SEIS. If these
18 considerations cannot be met, this project should advance
19 no further. I am 24 years old and today you are debating
20 my future and the future of my children and theirs to
21 come.

22 Please, please act responsibly and think of the
23 world you are going to leave behind to us, to Joseph, to
24 everyone in here. And thank you very much.

25 MR. JIM LAITI: My name is Jim Laiti. I

1 live at Ester on the Old Nenana Highway, and I have been
2 here my entire life. I work construction. I have been
3 fortunate enough to make a pretty good living over the
4 years. I worked in the construction industry prior to the
5 development on the North Slope and the construction of the
6 Alaska pipeline. I remember -- I worked at many villages:
7 Nome, Nuiqsut, Anaktuvuk, Barrow, and some others. And I
8 know what it was like in those villages prior to the oil
9 development, and I saw what the income from developing our
10 resources here in the state brought to those villages in
11 water and sewer systems, schools, some regional hospitals
12 and clinics. It's been a real boon for the state.

13 I know in the construction industry when I
14 started, we were lucky to get five or six months, and then
15 you were to your own devices. Many people left, had to go
16 somewhere else to make ends meet during the winter. I
17 have been fortunate enough to raise family here. My
18 brothers, my father, our whole family benefited from the
19 work that we found here. As others have said, funded
20 health care programs. Both my kids were born by cesarian
21 section. I can't imagine trying to pay for that in this
22 day or age, either -- socially we pay for it somehow. But
23 I have also got two grandsons now. My whole family lives
24 here.

25 The protection of the environment here is

1 critical, you know, in my opinion, and I think everybody
2 in this room would not argue about that. We don't want
3 any oil spill to the ocean. What happened in the Gulf, I
4 followed that very closely, and from my -- what I saw, I
5 mean it was clearly human failure, you know, from all that
6 I read. Of course, the courts will finalize that at some
7 point, but I think a very large oil spill, you know, that
8 term that we have here, is important to prepare for
9 something like that, but I think the real key is to
10 prevent an oil spill from ever happening. From what we
11 learned in the Gulf, we have got the capability to do
12 that, and that's what we need to work for.

13 Clearly, you know, we are very dependent on oil
14 development, on the petrochemical industry. All of us in
15 this room. Look here, you know, the lights in the room,
16 the fans in here running, those are provided mostly by
17 coal. We can do better than that. The energy in the room
18 here, if everybody put that energy into developing natural
19 gas, that would be much better.

20 Renewable energy, certainly we have to go there
21 and maximize that. I agree with that. But in the
22 meantime, I'm supportive of the OCS development. We need
23 to do it in the very best way that we can to ensure that
24 there is not any damage to our environment here. And the
25 jobs -- I diverted from my prepared remarks, and those

1 were my comments.
2 But I also represent the pipefitters here, Local
3 375. Many of our folks have worked to develop the
4 projects on the North Slope and the Trans-Alaska Pipeline.
5 Also I serve as the President of the Alaska Petroleum
6 Joint Crafts Council. We work about a million-and-a-half
7 hours, our folks do, maintaining the Trans-Alaska Pipeline
8 system. I've seen the benefit that it's brought to
9 workers and families. It's incredible here, what
10 difference it's made here in the state.

11 And I would just like to say that, you know, if
12 there is no further development -- you know, I
13 [indiscernible] the idea where the crude oil is going to
14 come from. If it doesn't come from Alaska, there still
15 will be demand. I talked to a welder on Monday that spent
16 time in the Middle East, and he talked about what -- what
17 a lack of focus there was on safety, on quality, and
18 especially disregard for environmental in the developments
19 that he was around.

20 At least here, like others have commented, we
21 have the freedom for our environmental community to come
22 out here, our locals that live along the coast to comment.
23 And I think that's very important. So I think we have got
24 to find the best way for the solutions and the situation
25 that we are in now.

1 And that concludes my comments. Thank you guys
2 for coming here to Fairbanks. I appreciate that.

3 DR. JIM KENDALL: Thank you, John.
4 Zebulon Woodman. I hope I'm pronouncing that correctly.
5 And following -- the next will be Sharon Alden.

6 MR. ZEBULON WOODMAN: Hi. My name is
7 Zebulon Woodman. I've lived in Alaska all my life. I'm
8 third generation union laborer, third generation working
9 in the oil field in Prudhoe Bay. I believe we should
10 drill in the OCS and the Chukchi Sea. With the economic
11 crisis in our nation, we have a responsibility to develop
12 domestic fields and try to free ourselves from the grip of
13 foreign oil. In Alaska we need to create jobs. We need
14 to refill the Trans-Alaska Pipeline, which many people
15 have stated is running at one-third of capacity. We have
16 a chance to safely drill in the OCS while protecting our
17 environment.

18 My family and my children here, we eat fish. We
19 fish in Chitina. We fish in all the rivers up here. We
20 eat moose, shrimp, halibut. We want to protect the
21 environment. I want my children to grow up hunting and
22 fishing up here, eating off the land. And so even though
23 we have a chance to drill, we can do it in a safe manner.
24 We need -- Alaska needs a sustainable supply of oil,
25 natural gas, and jobs. We can drill, protect the

1 environment for our children and future generations.

2 Please affirm the lease and allow drilling.
3 That's it for my comments. Thank you.

4 DR. JIM KENDALL: Thank you, Zebulon.
5 Sharon Alden followed by Paul Tengan. Sharon, the floor
6 is yours.

7 MS. SHARON ALDEN: I'm Sharon Alden, 159
8 Nevin Road, Fairbanks, Alaska 99712. And I'd like to
9 first say thank you for the opportunity to speak.

10 We've talked a lot about costs and economics and
11 jobs. What I want to say is that cleanups are costly.
12 The cost to the environment in the case of a disaster or a
13 very large oil spill are incalculable. We cannot fathom
14 what the real costs are to the environment, to the
15 animals, to the -- to the systems, to the people who are
16 relying on the environment for their subsistence. But the
17 costs of the cleanup of a spill are a little bit less
18 incalculable. We can calculate those, and those are huge,
19 what it would cost to our economy, to our -- to clean up a
20 very large oil spill in the Arctic.

21 We have seen that even without big
22 headline-worthy disasters, there have been many small
23 spills up on the Slope, small, medium, and large. And
24 these -- these have been caused by accidents and
25 negligence, deferred maintenance, letting things go. And

1 we still don't know how to clean up oil in the icy waters,
2 and especially in the type of weather that occurs in that
3 part of the Arctic Ocean. And I do believe that we have a
4 lot of know-how to do things right, to do things
5 environmentally safely. But having it and doing it are
6 different things, we have seen.

7 I'm going to make sure that I comment on
8 deferred maintenance. Things that are supposed to be done
9 end up not getting done and then, yes, there are always
10 the human errors. And it would be nice to have the boom,
11 but if you want a boom, we will get a mini boom if we have
12 a spill in the Arctic Ocean. We will have an economic
13 boom for the support of those operations, supporting the
14 workers to go and clean, transportation, food, lodging.
15 That will probably be mainly out of Anchorage, though, and
16 not Fairbanks.

17 That was -- that was really what I want to say,
18 that the costs in the event of a spill will be greater
19 than we can imagine and environmentally incalculable. And
20 financially it will be calculable, but it will also be
21 huge. Thank you.

22 DR. JIM KENDALL: Thank you, Sharon. Next
23 is Paul Tengan, followed by Paloma Garcia. Paul? Okay.
24 I'm going to put the card back here in case he just
25 stepped out for a minute. Paloma Garcia. Did I pronounce

1 that correctly?

2 MS. PALOMA GARCIA: Paloma.

3 DR. JIM KENDALL: I got close. The floor
4 is yours.

5 MS. PALOMA GARCIA: My name is Paloma
6 Garcia. And tonight we have heard a lot of mention about
7 the oil spill in the Gulf of Mexico. So I want to revisit
8 what happened last year while we speak about drilling in
9 the Arctic Ocean. On April 20, 2010, BP's Deepwater
10 Horizon well exploded in the Gulf of Mexico and caused the
11 largest accidental marine oil spill in the history of the
12 petroleum industry. The oil spill flowed for three
13 months, and it caused damages to the environment that will
14 take decades or even centuries to repair.

15 During the three months, 205.8 million gallons
16 of crude oil leaked from the Deepwater Horizon well. And
17 according to a NOAA report, about half or more of the oil
18 leaked into the Gulf remains on or below the Gulf's
19 surface in a dissolved or dispersed form. 665 miles of
20 coastline along Louisiana, Mississippi, Alabama, Florida,
21 and Texas got contaminated by oil. The people living in
22 the coasts were exposed to chemical poisoning that
23 affected their health. And according to the Fish &
24 Wildlife Service, Deepwater Horizon Oil Spill Response
25 Report released in April 2011, 8,233 birds, 1,150 sea

1 turtles and 170 mammals have been affected or killed by
2 the oil spill. And these numbers are just of the
3 carcasses that are found. So in real life there are way
4 more.

5 So now imagine if an oil spill happens in the
6 Chukchi Sea. And according to the EIS, there is a 27 to
7 54 percent chance of a large spill from the drill platform
8 at the Chukchi Sea that it can happen. The cold
9 temperatures, the low visibility, the extended periods of
10 darkness, the broken sea ice and the high winds that are
11 as strong as hurricanes will make any oil spill much
12 harder to control, and therefore it will affect the
13 environment in a much more devastating way.

14 Shell Oil claims to have more rigorous response
15 plans, but they are not field tested. There should not be
16 oil drilling in the Chukchi Sea or anywhere else until
17 there is proven technology capable of cleaning up a spill
18 effectively.

19 The Chukchi Sea of the Arctic Ocean is one of
20 the wildest and most biologically diverse seas left in the
21 world. If an oil spill was to happen there, it would
22 affect the health and life of the Inupiat community that
23 lives on the coast, and it would cause irreversible
24 damages to polar bears, endanger bowhead and beluga
25 whales, gray and finback whales, Pacific walrus, and any

1 migratory birds.

2 What we decide to do now will affect the Arctic
3 Ocean forever. And just as Jessica and Sam and Joseph ask
4 you to think about their future, I'm 22 years old, and I'm
5 asking you to think about my future, as well, and to keep
6 the Chukchi Sea as wild and biodiverse as it is now.

7 Thank you very much.

8 DR. JIM KENDALL: Thank you. Next is
9 Daniel Lum, followed by Carolyn Kremers. Daniel, the
10 floor is yours.

11 MR. DANIEL LUM: (Inupiaq.) I've not been
12 compelled to get up in front of politics like this before.
13 I was reading a paper this week and seeing all these
14 things that are developing, and I hear both sides. I
15 mean, I understand jobs. People need jobs. But at what
16 cost?

17 I should be talking to you guys. Never mind
18 these guys.

19 You can't set an oil boom. You can't set an oil
20 boom in the ice floe. You can't. Bottom line, you can't
21 set an oil boom in the ice floe. I'll repeat it one more
22 time. You cannot set an oil boom in the ice floe. I hear
23 these people talking zero percent potential of oil spill,
24 fantasizing about fear.

25 Why do you think my people are so united against

1 this development? Because for thousands of years we have
2 existed on this ice. For thousands of years we understand
3 these ice floes. We understand the power behind it. We
4 have a phenomenon known as evu where certain ocean
5 currents and wind currents, a big plate of ice push a
6 second plate onto shore and wipe it clean, clean, killing
7 everybody.

8 And in the turn of the century, a man came to
9 Barrow named Charles Brower, wrote a book called 50 Years
10 Below Zero. He described this event. He was inland
11 hunting geese or something, and he heard this thunder,
12 this deep thunder. And the ice came up onshore and wiped
13 out and killed a dozen people. And it happened
14 instantaneously. Granted, that doesn't happen very often,
15 but it happens. It happens.

16 I heard the guy from Shell come up here and talk
17 about, you know, technology and safety, all that. We have
18 the CEO of all of Shell come to Barrow, come to our
19 village. He came and seen the Chukchi Sea. He's seen our
20 culture, the way that we live. And I think it was
21 November or December. I was reading in the paper. John
22 someone -- I don't know -- but he came on my tour. I got
23 to spend about eight hours with him. He doesn't support
24 drilling anymore in the ocean. This is the head of --
25 he's retired a couple years, but this is the head of

1 Shell. He's saying no.
2 Well, considering that we have not just evu, the
3 big ice flowing up onto the shore, on a social level I
4 took a class from my accredited community college in
5 Barrow for my sociology. One of the concepts that stuck
6 with us is when the primary developers of the resources
7 are from not -- not from the area, only social problems
8 ensues. And that's been traditional of what's happened
9 since oil came up. I hear about clinics and schools, and
10 I'm grateful for that stuff, but at what cost?
11 Environmental catastrophe.
12 They cannot set an oil boom, by the way. They
13 cannot set an oil boom, by the way. Sorry. I'm a
14 realist. The ice is unforgivable. It's unforgivable.
15 The power of the ice, I have boated from Barrow to Point
16 Hope, all in between there. Twice I've come close to
17 losing my life with experienced people. The ice is
18 unforgivable. It's treacherous.
19 They have this zero percent potential of oil
20 spill, 60,000 jobs, we are all fantasizing about fear. My
21 people know what's going to happen. We understand the
22 ocean. This development is going to be a catastrophe.
23 It's going to be -- you guys don't understand the power of
24 the ice. You don't understand the power of the Arctic. I
25 mean, it's -- it's lucky that these offshore islands so

1 far have not created a catastrophe. I challenge the oil
2 companies. I challenge you guys to enforce and challenge
3 the oil companies to practice inside a boom in flowing
4 ice. You need two Russian icebreakers and a million
5 pounds of titanium boom to even come close to that. It's
6 impossible. You cannot set a boom in flowing ice. You
7 can't.
8 I heard one of these other guys talk, mistakes
9 happen. Yeah, mistakes happen. Look who -- you guys are
10 here, and everybody benefits here. But a mistake happens
11 in our water, it's our whole way of life. Let's look at
12 what happens on page 252, if you guys would open. You
13 don't have to. Let me just read a few up here, what would
14 happen. Very large oil spill, which is feasible with all
15 these giant ice floes. Number one, displacement; number
16 two, undesirability for use from contamination or
17 perceived tainting; three, reduced numbers due to species
18 deflection from oil; four, increased risk of costs --
19 increased risk or cost of the subsistence effort due to
20 having to travel further.
21 A very large oil spill would affect polar bear
22 hunting and sealing, bird hunting, sealing, whaling and
23 the ocean netting of fish. This next page it says in
24 here -- I want you guys to listen to this carefully
25 because this is the most important thing I've read in this

1 book. An oil spill affecting any part of the migration
2 route of the bowhead whale could taint this resource that
3 is culturally pivotal to the subsistence lifestyle.
4 You have our entire way of life in your hands,
5 and you want to gamble it away in treacherous sea ice
6 conditions so that we can sustain an economy, enrich oil
7 companies.
8 I don't think the tradeoff is there: Jobs,
9 catastrophe. Jobs -- oh, technology, it's safe, it's all
10 safe. That's what I hear, technology, technology,
11 technology. Yeah, we see technology. Look at the Gulf of
12 Mexico. Look at all these spills on the North Slope. I
13 mean, we've got this degrading old pipeline system; you
14 want to pump just millions more barrels through it out of
15 this sensitive area, which is completely dangerous. It's
16 ridiculous. This is -- this is a catastrophe waiting to
17 happen.
18 If you guys allow this, your Administration
19 allows this, you will live with the legacy of putting this
20 whole way of life, this whole ecosystem at jeopardy. This
21 is the biggest mistake in the world. This is a sensitive
22 area. The power of the ice is unforgivable. I hate to
23 see this happen.
24 I've never came up like this publicly. I feel
25 moved to do this, compelled.

1 Another thing that concerns me is
2 biomagnification, the concentration of toxins through the
3 trophic levels. We are at the top of the food chain, us
4 and killer whales and polar bears. Well, we eat the polar
5 bears, so we are technically on the top. Marine mammal
6 blubber is essential to our absence of vegetables and
7 fruits. It provides us with the minerals. That's how I
8 stay so trim.
9 But we are going to lose all of that in the
10 Chukchi. Yeah, you roll your eyes, but I'll tell you
11 what, your way of life is not on the line. When I heard
12 this guy talking from North Pole, I was visualizing what
13 if a bunch of Eskimos came to Chena Lakes and we found
14 this wonderful resource in Chena Lakes, and we needed jobs
15 and we -- it's not in your backyard, so it doesn't matter.
16 But it is in our backyard. It's our way of
17 life. It's our whole way of life. It's our whole way of
18 life. You can't set an oil boom in flowing ice. You
19 can't. This is a disaster. There will be no way to
20 contain it, anything. They can't do it. They simply
21 can't do it. We are waiting for a catastrophe. You can't
22 set an oil boom in flowing ice.
23 MS. CAROLYN KREMERS: My name is Carolyn
24 Kremers. I live at 1191 South Farm Court, which is off of
25 Chena Ridge. First of all, I appreciate the comments that

1 Daniel just made. And it happens that I might follow up
2 on that.

3 First I want to tell you I'm a writer. I write
4 poetry and literary nonfiction, and I teach at the
5 University of Alaska Fairbanks. I have lived in Alaska 25
6 years this October. I came here originally to teach in a
7 Yup'ik Eskimo village on the coast of the Bering Sea in a
8 very remote, small village of 330 traditional Eskimos.
9 They are not Inupiat like Daniel. They are the Yup'ik.
10 They were a little bit further south on the Bering Sea.

11 But I have spent time very close to the Chukchi
12 working at Port Clarence, which is on a little teeny
13 little spit of land on your map just south of Wales, which
14 is on the Chukchi. I wonder if you would be willing to
15 turn to page B28 in the EIS report. And maybe you could
16 look at the map and -- because I want to briefly talk
17 about two things: The scale that we are talking about
18 here in Alaska in the Chukchi Sea, and also my sense of
19 maybe a lack of realism in the EIS statement as it's
20 amended. And I'll bring this to a couple of pages in
21 particular in a second.

22 So if you look at the map, it's a nice map. It
23 shows the whole Chukchi Sea. It shows the coast of
24 Alaska, the area for the lease sales, and Russia. If you
25 look at the bottom left, you can see the Bering Strait.

1 It's marked in green. That's about 30 miles between
2 Russia and the U.S. Wales, where I lived, on Port
3 Clarence and for a summer I worked on a construction crew
4 there, is just a little bit south. It's on the map. You
5 can see that spit of land at the very -- underneath that
6 Bering Strait, that teeny little thing that is sticking
7 out is where I lived.

8 In comparison to that spit of land, this area
9 where the lease sales is is huge. It's huge. But I can
10 say that living on that spit, when I arrived, the whole
11 thing was surrounded by ice. I went there to do
12 construction at a Coast Guard station, a Loran Coast Guard
13 station.

14 And when we arrived, the whole thing was frozen.
15 There were literally several hundred seals. You could see
16 them from the shore. With binoculars you could count them
17 sitting on that ice. It was spectacular. It was amazing.
18 The head of the construction project for the Coast Guard
19 was frustrated because, of course, they couldn't do all
20 the work they did. They couldn't get the barge in there
21 with the supplies with all that ice. They had to wait
22 until it would go out. It would hold up the crew, cost
23 money. His solution, he said -- one day I heard him say
24 this: We should just blow up all that ice, just set off a
25 bomb and blow it up so we can get the barge in here.

1 Well, I kind of laughed. I didn't say anything,
2 but I knew that he half believed that that could be done
3 without consequence. Of course he wouldn't do it. He
4 didn't have the power to do it. But my sense from living
5 there was, yeah, that ice, it's amazing, it's powerful,
6 and I lived there in the summer. But I also lived in that
7 Yup'ik Eskimo village for two years year-round. And I saw
8 what it's like in the winter, what those winds can be
9 like, what that ice, how it moves in and out. One day you
10 would have a clear day; the next day we get totally
11 covered in ice, or maybe not even the next day; within a
12 few hours. Huge winds which have been described earlier
13 tonight.

14 The weather conditions are -- they are very
15 humbling, as people have said. They are humbling. They
16 are not predictable. And as Jessica pointed out
17 earlier -- very eloquently, I thought. This is only going
18 to become more -- we have climate change happening. These
19 weather conditions are going to become bigger and more
20 unpredictable. So we have a lot to think about here.

21 And I just want to say that I feel it's very
22 important. If people are -- in Washington, D.C., are
23 making decisions about the Arctic, which they have never
24 lived in, never visited, and maybe even never seen even
25 from an airplane, they need to be very respectful and very

1 careful, and they need to pay attention to every bit of
2 information they can get in order to make informed
3 decisions.

4 Now, I understand the purpose tonight, from what
5 you all said at the introduction, was that one thing you
6 really want is for us to think about this EIS statement
7 and see whether it seems adequate now that it has been
8 revised or whether it still is not adequate. That seemed
9 to be the main purpose of these hearings.

10 DR. JIM KENDALL: Correct.

11 MS. CAROLYN KREMERS: So I'm glad -- we
12 can't ever really probably avoid hearing opinions about
13 whether people support drilling and oil and gas
14 development in the Arctic Ocean and Chukchi Sea or maybe
15 the Beaufort Sea later, who knows. You know, there are
16 people for, there are people against; but it seems to me
17 that's a big issue. I mean, we are going to hear about
18 that because these things are all interrelated. We can't
19 think about an EIS statement without thinking about what
20 is it for.

21 So I appreciate all the comments that we have
22 made tonight and I hope they have been helpful to you.
23 But as far as the EIS statement goes, I did want to point
24 out that the maps do show, if you can hear from the people
25 who live there, how very huge this area is. When we look

1 at how close Russia is, 30 miles away at the Bering
2 Strait, and how far, how much huger that area is where the
3 oil and -- where the lease sales are, then if we think
4 about what it says in here about the part that you said
5 needed to be added, one part, you said you got 150,000
6 public comments about, was the desire, the theme thing
7 that you noticed was that people needed to look at what
8 about a large oil spill, what might happen.

9 So I didn't have a lot of time tonight, but I
10 looked at some of the pages. And I just want to go --
11 especially, I think, following up on what Daniel just said
12 to page 135 and 136. And just briefly look at those, if
13 you can keep thinking about what it's really like out
14 there.

15 So it says here -- this is from Chapter 4,
16 environmental consequences and Section 4E, effects of a
17 very large oil spill, this is just a little section. It's
18 less than a page -- or maybe it's a page, Levels of
19 Recovery and Cleanup Activities. I just want to read a
20 few of these sentences. And I think everyone in here who
21 has been to the Arctic -- as you saw that's quite a few
22 people -- can picture this. You could probably have
23 another conversation going on in your head as you think
24 about these sentences. And I'm just going to read a few
25 and comment at the end about them, and then I'll be done.

1 It says -- so I'm at that part right near the
2 bottom, Levels of Recovery and Cleanup Activities. "The
3 levels of activities required to apply the techniques
4 described above are dependent on the specific timing and
5 location of a spill. As weather, ice and logistical
6 considerations allow, the number of vessels and responders
7 would increase exponentially as a spill continues. The
8 levels of activities described below are reasonable
9 estimates provided as a basis for analysis."

10 So take a look at the things that are
11 listed below. The first one, between five and ten staging
12 areas would be established. If you look at the map, where
13 would those staging areas be if it's very far from the
14 shore? The second one, about 15 to 20 large skimming
15 vessels could be used in offshore areas. It lists some of
16 the vessels, including other barges from Prudhoe Bay and
17 vessels from Cook Inlet and Prince William Sound. Those
18 of us who live here know that those places are quite far.
19 It would take, even in good weather, a while for any
20 vessels to get up to where we are talking about. But of
21 course, if you have ice and bad weather, they probably
22 could get there.

23 The third one, thousands of responders. This
24 one is very interesting, I think. Thousands of responders
25 from industry, federal government, private entities, could

1 assist spill response and cleanup efforts as the spill
2 progresses. Weather permitting, roughly 300 to 400
3 skimming, booming and lightering vessels could be used in
4 areas closer to shore. Did I mention 300 to 400 vessels
5 closer to shore and thousands of people helping?

6 But when you live here and you have lived in the
7 Bush or in any of these remote areas, you just -- you have
8 a sense of it's not that simple. I mean, you have to get
9 those people there. You have got to get that equipment
10 there. You have got to have food to feed them. It's
11 really hard for us to describe this to people who have
12 never been in the Bush in Alaska for you to even
13 understand. As someone said, there are no roads. But not
14 only that, there are not airstrips that can -- later it
15 mentions airplanes and helicopters that could come.
16 That's over on page 136, the second to last bullet.

17 Dozens of planes and helicopters. Dozens of
18 planes and helicopters would fly over the spill area,
19 including impacted coastal areas. Existing airport
20 facilities along the Arctic coast would be used to support
21 these aircraft. And it lists airports, again, that not
22 only are far away, like Kotzebue and Barrow, and then
23 smaller ones that are not capable of having any large
24 aircraft land there.

25 Many of these, the biggest thing that can land

1 is a Beaver, and in many cases just Cessnas and smaller
2 airplanes land. These are often airstrips in these
3 smaller places that don't have lights or they have very
4 few lights. They are not easy to keep open when you have
5 blowing snow.

6 And then we have that whole aspect of darkness.
7 I know it's hard to imagine, especially because you are
8 here right after the solstice, the longest day of the
9 year. Well, it's the opposite in the winter. It's dark.
10 And in the Arctic Circle where we are talking about, above
11 the Arctic Circle, it's dark all the time. The sun
12 doesn't rise. So we are talking not only about not being
13 able to get equipment and people and vessels and aircraft
14 there; we are talking about the conditions. Not only can
15 we not get it there, but we also are dealing with the
16 weather.

17 So I just -- I just wanted to say I didn't get
18 to look at a lot of this yet, but the part I looked at is
19 not realistic. And it's -- it's just not accurate. And
20 you know, I don't know if you need people to look at every
21 section of this and see, but it would be good to have some
22 people who live in Alaska, who live here and know this
23 place, maybe help if you need it to be better.

24 I think it's especially important because you
25 did say that this will be used to decide whether to

1 reaffirm the sale, whether to modify it, or whether to
2 cancel it. It's an important document, and I really
3 appreciate the chance that you gave us in Fairbanks to
4 talk about it. Thanks.

5 DR. JIM KENDALL: Thank you, Carolyn.
6 Next is Jerry Walker, followed by, I believe it's David
7 Valentine. In the meantime, Jerry, the floor is yours.

8 MR. JERRY WALKER: A very hardy welcome,
9 Director Kendall, to you and your associates. We
10 appreciate you coming to Fairbanks to solicit our input.
11 I have provided some written testimony.

12 My name is Jerry Walker. I live in Bluebird
13 Subdivision, Fairbanks 99709. Lease Sale 193 should be
14 affirmed as held in 2008. I think the revised draft
15 supplemental environmental impact statement more than
16 adequately addresses concerns of the Outer Continental
17 Shelf oil and gas Lease Sale 193 Chukchi Sea, Alaska.

18 The revised draft SEIS now includes extensive
19 analysis of the environmental impact of natural gas
20 development, the inclusion of additional what had been
21 perceived as incomplete, missing or unavailable
22 information, and does include analysis of a hypothetical
23 very large oil spill scenario. I believe this report,
24 including the various appendices, now provides sufficient
25 scientific data and analysis and a very strong basis for

1 the Secretary of the Interior to make an informed decision
2 on which to affirm Lease Sale 193.

3 Director Kendall, I urge you to provide your
4 recommendation to Secretary Salazar to expeditiously
5 accept the revised report and affirm the lease. I believe
6 sufficient safeguards will be in place to conduct
7 responsible activities with the respective accountable
8 parties in the area. I appreciate and respect the very
9 extreme caution exercised to get us to this point.

10 With this accomplished, I am compelled to remind
11 all those with ability to move this process forward that
12 our national security has been and will continue to be not
13 only at risk, but will continue to erode until affirmation
14 of the lease is completed and responsible implementation
15 of an excellent plan commences.

16 Please expeditiously accept the report and
17 recommend affirmation of Lease Sale 193. Thank you for
18 your good work.

19 DR. JIM KENDALL: David, followed by Jane
20 Ransdell.

21 MR. DAVID VALENTINE: Thank you. Thanks
22 for coming to Alaska and Fairbanks in particular and
23 listening to us. I appreciate your coming here.

24 I just wanted to make a very simple point. I
25 have been hearing -- I didn't come with prepared remarks,

1 but I have been hearing benefits, got lots of really cool
2 benefits that would come from this. And then I hear
3 impacts. We have got lots of really scary impacts that
4 could happen. How do we compare those?

5 The traditional way that natural resource
6 managers compare benefits and impacts is to look at risk.
7 And that is the probability of an event multiplied by its
8 potential impacts. And I know you guys know that, but
9 it's important to sort of bear that in mind.

10 Well, the problem is that human beings are
11 really lousy at estimating probabilities, with all due
12 respect, because I know you have included estimates of
13 probabilities in your draft EIS, but we are pretty bad at
14 doing that. So what do we do?

15 Let me take a step back from that and just sort
16 of note that in the wake of the attacks of September 11th,
17 what happened to the airline industry? Well, it really
18 suffered a lot. Why? Because people who traveled
19 suddenly traveled by car because they perceived that as
20 safer.

21 Now, all of the actuarial tables, even knowing
22 that -- even in light of the attacks of September 11th,
23 indicated that air traffic was still far safer than travel
24 by car, yet people chose to travel by car because they
25 perceived incorrectly the probability of having something

1 bad happen.

2 So we are lousy at assessing probabilities, but
3 nevertheless, that's what we need to do is to be able to
4 come up with a reasonable way of estimating and
5 understanding the probability.

6 The second point that I wanted to make is that
7 if we take the mid-point of the probabilities that have
8 been suggested at about 40 percent, let's say -- okay.
9 Let's sort of imagine that you have a potential of having
10 a job, and in this job you have a 40 percent chance over
11 the lifetime of the job that you are going to lose your
12 left arm. Would you take that job? Is that an acceptable
13 risk? And I think most people in the room would say, no,
14 that's not an acceptable risk. Well, okay.

15 If you -- and your -- if you take this job and
16 your neighbor has a 40 percent chance of losing his left
17 arm, would you take the job? Well, that's where we get to
18 Dan's testimony there. We are not talking about our left
19 arms, necessarily. We are talking about their left arms.

20 So those are the two points that I wanted to
21 make. One, probability is important and it's very
22 difficult to assess. And second, let's remember who's --
23 who's really at risk.

24 Thank you.

25 DR. JIM KENDALL: Thank you very much,

1 David. We have got Jane Ransdell, followed by Paul
2 Tengan, if he's back in the room. Jane, the floor is
3 yours.

4 MS. JANE RANSELL: My name is Jane
5 Ransdell, and I live at 607 Bullion Drive in Fairbanks
6 99712. I do not believe oil companies can effectively
7 clean up an oil spill in the broken ice in severe
8 conditions of the Chukchi Sea. A spill would have a
9 devastating effect on bird and fish and mammal life of
10 this area. Some of these species are already showing
11 clear signs of significant stress. The maintenance of the
12 populations of these species in this area is essential to
13 the subsistence lifestyle of the Inupiat people of the
14 Chukchi. Allowing drilling in the Chukchi denies the
15 right of the Inupiat to continue their traditional way of
16 life because the eventual spill will severely degrade the
17 habitat of their traditional natural food source long
18 term.

19 Any significant spill in broken sea ice
20 conditions would be a worst-case discharge, too difficult
21 to clean up fast enough for survival of the wildlife in
22 the area. Just too difficult to clean up. Then what?
23 Apologies, regrets, blame shifting, compensations, chaos,
24 buyouts, cop-outs. And what will that be worth? Will
25 that make it right with the Inupiat people? Will that

1 bring back the wildlife and reverse the damage?

2 Drilling in the Chukchi Sea is not worth the
3 risk of ruining the rich habitat of this incredible area.
4 Thank you.

5 DR. JIM KENDALL: The last card I have is
6 Paul. Paul Tengan come back in the room? Okay.

7 Now, one thing I'm very adamant about is that
8 everybody has a chance to express their thoughts, their
9 opinion, their comments. We want to make this as
10 transparent as possible, and I want to make sure no one
11 leaves the room feeling they didn't have the chance to be
12 heard. So is there anybody in the room that did not have
13 a chance, did not put a card in there that now feels,
14 well, maybe I do want to say something? We are not going
15 anywhere until everybody here is satisfied they have had a
16 good say. So please, if anybody would like to come up
17 here, you are more than welcome to.

18 This is very important to us. We are not the
19 decisionmaker. We want to make sure this is the best
20 possible document. This is a revised draft. A lot of
21 people are working on it. NOAA has worked on it with us,
22 other federal agencies. And I want to be able to say when
23 we go up to the Secretary --

24 Aha, now I'm a happy man. Your name, sir.

25 MR. TONY FERNANDEZ: Yes. I never talk on

1 the mike. I get so nervous. I get nervous when I talk
2 through mikes.

3 DR. JIM KENDALL: Your name, sir?

4 MR. TONY FERNANDEZ: Tony Fernandez. I
5 live one block from here, 177 7th Avenue.

6 I listen to everybody talking over here, but to
7 me it's gone to the government. The federal government
8 sold our leases in the ocean, not their lease. I worked
9 on Pump 5 for 21 years, and I retired. Everybody talking
10 about jobs around here. No, you don't need no jobs. He's
11 talking about oil, crisis in oil. There is no crisis in
12 oil.

13 It's 20 to 50 capping holes in Prudhoe Bay. Why
14 you don't put that oil in the pipeline? When I got over
15 there, we must push it in the pipeline 2,000,000 barrels a
16 day. What is still there is 500- to 600,000 barrels.
17 Why? Why the oil companies manipulate this well data? To
18 keep the price high? It's no good. We pay the gallon of
19 oil over here real cheap when we get it from Kenai way
20 back before this pipeline pass by and we build the
21 refinery.

22 Right now we pay 4.60 is why it's killing me to
23 warm my house with this. You see what I mean? These guys
24 needs to push more oil and go over there and pump the
25 lines to these guys; punching, I think there's probably

1 about 20 or 50 holes already drilled in Prudhoe Bay.

2 Why you want to go in the water, you know, for a
3 big, you know, mess? And like this guy was talking, you
4 know [indiscernible], you see. He's talking about this
5 and that. No, no, no, no, no. Let's go to the real
6 thing. Go over there and drill in the ground, and you
7 don't have no damage. That's the bottom line. Go over
8 there to drill over there, that's dangerous.

9 And he's talking about oil spill containment.
10 You can't contain oil. I practice all the time in the
11 Yukon River, and if that line break right there and the
12 oil coming down, you cannot stop the oil. The oil run all
13 the way to the ocean because the water is so dangerous.
14 You can't stop it over there. We tried a pig about this
15 big with a boom, and he put that [indiscernible], you see.
16 That's why, you know, that's so dangerous. That's why I
17 hear everybody talk about jobs and this and that. No, no,
18 no. You need to control this and drill in the ground.
19 There is plenty oil over there.

20 Look at last winter and the winter before; they
21 drilled two holes right there close to ANWR, went straight
22 down and went horizontal to steal the oil from ANWR. Why
23 he don't put this oil to the land right now? Why waiting?
24 They're just keeping the prices way high to do all this
25 drilling in the ocean.

1 Look at what happened in Louisiana. You kill
2 all the fish, all the -- everything is down, and the
3 fishermen is way down. You don't see no money. Okay.
4 Thank you. Thank you very much.
5 DR. JIM KENDALL: Thank you very much.
6 You used the microphone well. Okay. I don't want to be a
7 nag. I'm sometimes accused of that. I want to make sure
8 everybody has a chance before I close it out. Is there
9 anybody else that would like to come up? Going once,
10 going twice. Do I have to tell a joke before I get to
11 three? Because I really -- this is important to us, and I
12 want all the comments.
13 Well, with that, on behalf of the staff of
14 BOEMRE, or BOEMRE [pronunciation], as someone said with a
15 Cajun influence down in the Gulf, thank you very much for
16 coming tonight. The document is on the Web. We have
17 this. We passed some of the big documents out. Please go
18 through it. If you fund things you think that needs to be
19 dealt with, if there is mistakes, if there something we
20 are missing, go to regs.gov. The address is back there on
21 the chart. And get us those comments.
22 This is a group effort. I want to be able to
23 take the result and all the comments and take it and send
24 it upstairs and say this is everything you need to
25 consider before you make your decision. So with that,

1 number three, thank you very much and have a nice evening.
2 (Proceedings adjourned at 10:03 p.m.)
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1 REPORTER'S CERTIFICATE
2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:
4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.
12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.
15
16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska
20 My Commission Expires: November 5, 2012
21
22
23
24
25

Barrow

PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Barrow, Alaska

Taken June 27, 2011
Commencing at 7:20 p.m.

Volume I - Pages 1 - 59, inclusive

Taken at
Inupiat Heritage Center
Barrow, Alaska

Reported by:
Mary A. Vavrik, RMR

A-P-P-E-A-R-A-N-C-E-S

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BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: It's 20 after, so we are
going to start the meeting now in just a minute. Before I
make the introductions and go into any details, I want to
ask someone to give a blessing in just a minute here.
President Doreen, can I ask you to give a blessing before
we start the meeting please?

(Blessing offered by Doreen Lampe.)

DR. JIM KENDALL: Thank you very, very
much. Good evening and thank you for taking time out of
your busy day to join us. My name is Jim Kendall. I'm
the Regional Director of the Alaska Regional Office of the
Bureau of Ocean Energy Management, Regulation and
Enforcement. I know that's a long line there, but we just
go by BOEMRE.

Now, one thing I noticed at some of our other
meetings is, as we got into the meeting, someone asked who
are you, where are you from, just what are you. Well, we
are a federal government agency. We're part of the
Department of Interior. We are not an oil company. We
are not a nongovernmental organization. Our job is to
manage the energy and mineral resources of the Outer
Continental Shelf. We pull the information together and
we pass it on to the decisionmaker, in this case the
Secretary of the Interior.

Now, what we are doing tonight is holding public
hearings on the Revised Draft Supplemental Environmental
Impact sale for Lease Sale 193. Now, that's mouthful.

We are doing this meeting a little bit
different. What we are going to do is after I introduce
the team here, I'm going to ask them to go through a
series of flip charts so that we all start from the same
knowledge base. Okay? So this is a little bit different.
We are going to provide a lot more information at the
beginning so that when we get into public comment,
everybody has an idea of really why we are here.

Now, starting with introductions, at the front
table here I've got Sharon Warren. Sharon is the project
manager for the supplemental EIS. Next to her is Mike
Routhier. Mike Routhier is the coordinator of the EIS.
He takes all the parts and pieces and puts it together.

Now, as it's being put together, we have got to
make sure it flows and everybody understands it and all
the definitions are there. That falls on the back of
Scott Blackburn in the back there. Raise your hand,
Scott. Scott is not only a technical expert in what we
do; he is also a technical editor. So he tries to make
the document written in a way that people can understand
it.

We also have back there Michael Haller. Michael

1 Haller is our community liaison. He helps us work with
2 the communities, like here in Barrow, to get your input.
3 We also have tonight with us James. James is a
4 translator. If anybody feels something needs to be
5 translated, James has agreed to help us out. All right.

6 Now, with that -- oh, I also have to introduce
7 Mary Vavrik. Mary Vavrik is our court reporter. Again,
8 everything that takes place at this meeting is very
9 important. Okay. Our job is to put together the
10 information that the Secretary and his team, the
11 decisionmaker, will make. So we put the information
12 together. We send it up top. Mary is instrumental to
13 make sure everything you say is entered. So please, when
14 you speak, speak loud enough so it can be heard. State
15 your name so we can get that for the record. And if you
16 happen to have anything -- any written comments, Mary will
17 be happy to accept it.

18 Now, with that, we are going to go to a brief
19 introduction of why we're here. Again, this is a little
20 bit different from the way we usually do things. Okay.

21 Now, I'll give you a warning. After the little
22 briefing is done, to maximize public input and so that
23 everybody can hear, we are going to move the chairs so
24 everybody sits in a circle. And then we are going to go
25 around the room with the mike as long as it takes until

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1 everybody feels they have had good input. If we leave
2 here tomorrow morning and someone didn't speak their
3 piece, we failed. It's very important that if you have
4 something to say, we hear it, whether it's at the
5 beginning or at the end. It just has to be said. Okay?

6 With that, I'm going to give the microphone over
7 to Sharon. And Sharon, could you walk us through what we
8 all need to know before we start getting to work.

9 MS. SHARON WARREN: Thank you, and
10 welcome. Can you hear me? Here we are. Like Jim said,
11 we wanted to go through and let you know why we're here.
12 And we have got some posters to explain why we're here and
13 what we would like from all of you on this document.

14 Why we're here today, we get -- we need your
15 comments on the Revised Draft Supplemental Environmental
16 Impact Statement for sale 193. The documents are back
17 there on the table. We have documents as well as we have
18 CDs of the documents. So if you haven't received one and
19 you would like one, please take one this evening.

20 What was Lease Sale 193? Lease Sale 193, first
21 of all, we had done an environmental impact statement and
22 published it as final in 2007. In 2008 we had a lease
23 sale. And at that lease sale, we had six companies bid
24 on -- to explore for oil and gas. We offered 29.3 million
25 acres, and there was 487 leases issued for about 2.8

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1 million acres.

2 Over here on this map is the area of the sale.
3 And this was the sale area that was out here in red. This
4 is what we offered. There is some alternatives that
5 were -- there are some alternatives, and you will find
6 that out in the supplemental EIS, that we offered off the
7 coast and there is an alternative -- this alternative is
8 Alternative 3.

9 It was not -- the decision was made not to
10 select that alternative by the Secretary, and so that's
11 why you will see leases in this area here [indicating].
12 This alternative is on the table on this -- in this
13 document for the decision for the Secretary. He can
14 either decide to affirm the entire sale area or he can
15 select this alternative and even with the leases in it.
16 And we will explain what kind of happens with that.

17 But this is the entire sale area that was
18 offered. And you can see the blocks that were leased by
19 the six companies.

20 Then what happened? Days before the lease
21 sale -- the lease sale was offered on February 6, 2008,
22 but before that time, the plaintiffs sued to validate the
23 lease sale. They alleged that the EIS did not adequately
24 assess the environmental impacts.

25 A In that litigation -- usually in litigation sometimes

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1 plaintiffs will ask for an injunction to stop the sale.
2 That was not asked for. So the sale was not stopped. It
3 continued on. And that's the reason why we have -- we
4 have this lease sale is because the Court did not prevent
5 us from holding it.

6 Then in July 2010, the District Court for the
7 District of Alaska ruled that most of the EIS was
8 satisfactory, but there were three issues the agency
9 needed to address. And those issues were the Court said
10 the agency failed to analyze the environmental impacts of
11 natural gas development, despite industry interest and
12 specific lease incentives for such development.

13 In our notice of sale, we had a lease incentive
14 that if they purchased a lease for oil, then there was an
15 incentive for them to also produce the natural gas.
16 However, we didn't analyze that in the environmental
17 impact statement that was released in 2007. So the judge
18 said go back and analyze that because you offered
19 something that you didn't analyze in the environmental
20 impact statement.

21 The judge also said that the agency failed to
22 determine whether missing information identified by the
23 agency was relevant or essential under the federal
24 regulations and, in addition to that, failed to determine
25 whether the cost of obtaining the missing information was

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1 exorbitant or means of doing so was unknown. The judge is
2 saying that we didn't follow the regulations that were
3 there for us to follow. So he said go back and do it.

4 So we went back and we followed the Court's
5 order. We drafted a supplemental environmental impact
6 statement to address the three concerns. Many of you may
7 have attended the public hearing we had in November here
8 on that document. And so we were addressing the Court
9 concerns with that document. And we got comments on the
10 draft SEIS. The comment period included public hearings
11 in Kotzebue, Point Hope, Point Lay, Wainwright, Barrow and
12 Anchorage, as well as a series of government-to-government
13 meetings at the affected communities.

14 MR. MICHAEL ROUTHIER: So the next
15 question is, was the draft SEIS finalized after that. And
16 the answer is actually no. In this situation, we put out
17 the draft document. We held the public meetings like we
18 are doing for this document tonight, and solicited public
19 comments. We received over 150,000 public comments.

20 Many of those requested that the agency consider
21 the environmental impacts of a very large oil spill. This
22 was occurring on the heels of the Deepwater Horizon event.
23 A very large oil spill was on everyone's mind, for obvious
24 reasons. So we, as an agency, reviewed the comments and
25 considered our options and decided that the best thing

1 that we could do is to analyze a very large oil spill
2 scenario.

3 And so that we do it correctly, we decided to
4 put it into an EIS form and add it to the draft SEIS,
5 which we already had.

6 So I mentioned a few times now a very large oil
7 spill or VLOS or V-L-O-S. And that begs the question,
8 what is it? Well, like it says up here, it's a very large
9 oil spill. And basically it's a tool for us to analyze
10 and understand all the potential environmental effects
11 that could happen in the event that something goes
12 incredibly wrong and there is catastrophic oil spill.

13 It's a scenario. It's purely hypothetical.
14 It's an extreme case. Basically, in developing this
15 scenario, our geologists who have the subject matter
16 expertise in these issues, were instructed to basically
17 consider or tell us what would be the largest possible
18 flow rate from any reservoir known in the Chukchi Sea.

19 So they looked at basically any sort of variable
20 that would go into determining how fast the oil will come
21 out or how big would the oil spill be. They maximized all
22 those variables, and we got a very large number. But that
23 could be good because it helps us understand all the
24 possible environmental effects, and it accomplishes the
25 main goal here, and that is informing the decisionmaker.

1 It is important to understand that the very
2 large oil spill is purely hypothetical, obviously. And
3 it's also different than another concept that you are
4 likely to hear in the context of our agency's work, that
5 term being worst-case discharge. I'm not sure everyone
6 here has ever heard that term. But that term comes from
7 our regulations. It's a term specifically within our
8 regulations, and it's a calculation that's required
9 whenever an oil company submits an expiration plan or
10 proposes to actually drill a well.

11 Now, that's not happening right now. Right now
12 we are at the lease sale stage. If some or all of the
13 lease sale is reaffirmed, then we could possibly go to the
14 next phase which would be an exploration plan phase. We
15 are not there yet. But if we get to that phase, within
16 the exploration plan from the oil company they would do a
17 worst-case discharge, which basically calculates how big
18 an oil spill could be, but it also takes into account a
19 lot of additional information that would be known at that
20 time.

21 And by additional information, I'm talking about
22 a specific location, specific type of well using specific
23 technology, having specific responses that would be on
24 hand. So it's a much more detailed calculation.

25 And basically our agency would then review that

1 calculation as well as the rest of the exploration plan
2 that could potentially be submitted. We review that and
3 make sure that it contains everything it needs to contain.
4 It does the analysis properly. We do that review before
5 deciding on whether to approve anything.

6 MS. SHARON WARREN: So again, what input
7 does BOEMRE need? Again, this is in the lease sale stage.
8 There are four stages in the OCS process. We have a
9 five-year program. We have the lease sale stage. We have
10 an exploration plan stage. And we have a development
11 production stage. We are at the lease sale stage. So
12 this is a decision the Secretary will make, whether or not
13 to affirm the lease sale that has already happened in 2008
14 or make some other changes concerning that lease sale.

15 So we prepared the draft document, revised draft
16 supplemental that addresses the issues raised by the Court
17 and the analysis of the environmental impacts of a very
18 large oil spill. When we were here in November, we had
19 just a document that was attributable to where we were
20 going to respond to the Court. This document has
21 information in total from what we used to respond to the
22 Court, as well as the very large oil spill.

23 So this document supplements -- it's a draft
24 supplement, and it's supplementing the final EIS that was
25 prepared in 2007. So in references to some of the -- in

1 the document you may see references to sections of the
2 final EIS. That was because that was already released in
3 2007, and this is just supplementing the information
4 that's in that document.

5 We are now seeking substantive comments on the
6 draft document. So if you have information that -- and
7 you want an opportunity to provide that information, this
8 is the time to do it. The public hearing and the public
9 comment period -- we are going around the communities for
10 the public hearing like we are doing today. The public
11 comment period is open until July 11th. So we would ask
12 you to get your comments to us by July 11th. There is a
13 website to go to. We are using regulations.gov, but if
14 you go to this website, it will take you directly to the
15 regulations.gov where you can submit your comments, and we
16 have instructions on the back table on how to submit
17 comments using regulations.gov.

18 And if you have got any questions after you take
19 a look at that, please talk to Scott Blackburn, and he can
20 answer questions concerning how to submit comments through
21 regulations.gov.

22 So what happens after these hearings? First we
23 will consider the comments that we received through both
24 of the public hearings, as well as through the
25 regulations.gov comments. We will prepare a final

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1 supplemental EIS.

2 This is on a court schedule. We are in
3 litigation with this document, and this litigation is
4 before Judge Beistline with the U.S. District Court with
5 the District of Alaska. He issued an order on May 19th
6 saying, okay, you can do your very large oil spill
7 analysis, but you need to have the Secretary to make the
8 decision by October 3rd of 2011.

9 In order for us to do that, we need to have the
10 final EIS out at least 30 days before the Secretary can
11 make his decision. And again, this is a lease sale
12 decision whether to affirm the lease sale or to modify and
13 make changes to the lease sale; not to offer more land,
14 but it will be within the confines of what was -- what was
15 first offered.

16 Once the Secretary makes his decision, both that
17 decision and the final SEIS will be filed with the
18 District Court. There will be a briefing schedule
19 established by the plaintiffs as well as the defendants,
20 and it will go through the litigation process. The Court
21 will then decide whether or not the agency has met its
22 obligations under the National Environmental Policy Act
23 and the federal laws that we have to follow.

24 Again, this is on the lease sale. This is not a
25 drilling plan. We are not even to the stage of the

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1 exploration on there because before even any exploration
2 can take effect in this area is, one, the Secretary has to
3 determine one way or the other that there is going to
4 remain leases out there; and also the District Court has
5 to decide whether or not we fulfilled our obligations
6 under NEPA. And then even that, the Court would have to
7 allow exploration because right now the Court does not
8 allow exploration or anything of activities like that on
9 the lease.

10 And then there is further NEPA review. So even
11 after we go through this and it just -- there is a lot of
12 ifs. If this, if this, if this. And even with the
13 exploration plan, there is additional NEPA review on it.
14 So it's another stage process.

15 And so that's what I wanted to say. Thank you.

16 DR. JIM KENDALL: Thank you very much.
17 Now the fun part starts. And since we have this many
18 people in the audience -- we had about the same amount in
19 Kotzebue. And we did something to try it and it worked
20 really, really good. First everybody said, I don't think
21 so, but we tried it, and by the end of the night everybody
22 said, this is the way you have to do your meetings.

23 We took the chairs and we put them in a circle.
24 Everybody sat in the circle and we passed the microphone
25 around. And you could either pass, pass it to the next

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1 person, and that person could say something or pass. And
2 we have kept going around till everybody agreed I've said
3 all I needed to say and I'm just going to pass. And so
4 I'd kind of like to try that here. Would anybody be
5 really opposed if we just moved our chairs a little bit
6 and we could see each other's faces while we talk? Thank
7 you. I see George shaking his head yes. So let's make
8 the circle up here so our court reporter can see our faces
9 while we talk. Thank you. This will take about three
10 minutes.

(Off the record.)

11 DR. JIM KENDALL: Okay, Friends. Let's
12 take our seats. I know we have a nice meeting in the
13 back. James, come on up. I think we may have to make our
14 circle closer.

15 MR. GEORGE EDWARDSON: People will come
16 in.

17 DR. JIM KENDALL: Okay. Good. Okay. We
18 are going to start in 30 seconds. Now, usually the best
19 way to start is to start with someone in authority. And
20 so if it's all right, I'd like to go to a new friend of
21 mine to see if she would like to start it off. And
22 Doreen, you are free to pass and pass the microphone to
23 your right or you can speak now or speak later. It's up
24 to you. The mike is yours if you want it.
25

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1 MS. DOREEN LAMPE: My name is Doreen
2 Lampe. I live in Barrow all my life. I am married. I
3 have three kids and a couple of grandchildren. I'm
4 concerned about this draft supplemental EIS because our
5 tribal members in Point Hope had to go the length to sue
6 the government to get their voices and their concerns
7 heard. And we had a nice little briefing this afternoon
8 with the ICAS board of directors from our villages,
9 Nuiqsut, Point Lay, and Point Hope where it was called on
10 such short notice.

11 But my main concern is the -- the reason we had
12 to sue, and it seemed like the government has had a blind
13 ear to our concerns. And even though it's not in our best
14 interest to sue the federal government, we had to listen
15 to our tribal members in Point Hope. And there was a bad
16 year for them when they didn't catch any whales. And they
17 were screaming and hollering that the seismic activity
18 that was taking place in the Chukchi Sea was the main
19 reason that they were not catching whales in Point Hope.

20 And we were not being acknowledged. We were not
21 being addressed or respected. So we had to join our
22 tribal sister government in Point Hope, one of our village
23 tribal governments under ICAS. We had to join them in
24 this lawsuit in Lease Sale 193. And from our discussions
25 this afternoon, I'm not sure that this draft supplemental

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1 EIS will answer the concerns that -- that our primary
2 community members of Point Hope, Native Village of Point
3 Hope have sued for is because of the hardship of the
4 access to their hunting and harvesting of our natural
5 resources.

6 And in briefly just looking at the table of
7 contents today, first time I seen this draft supplemental
8 EIS today, of all the days when we are having a meeting
9 tonight, and I'm asked to comment on it in this very short
10 notice. And the biggest concern that I feel why we joined
11 -- why ICAS joined the Native Village of Point Hope's
12 lawsuit is because of the trouble, the trouble that
13 hunters have in accessing subsistence resources and trying
14 to get the attention of the government when big oil is
15 right there blasting away seismic air guns and scaring all
16 the game away for miles around when this is the only one
17 chance to harvest those natural resources.

18 So I'm very skeptical about this draft EIS,
19 supplemental EIS. I didn't see any real teeth in assuring
20 hunters that they will mitigate the impacts from all four
21 stages of your programs, or five stages now, including the
22 five-year program.

23 So I'm very concerned about how difficult our
24 future hunters are going to have so much red tape and so
25 much traffic from oil industry, so much interference that

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1 our ice cellars might not get filled up. We might not
2 have seal oil one year.

3 But I thank you for taking the opportunity to
4 sit at our tables with us and discuss your draft
5 supplemental EIS this afternoon. And I hope that we can
6 work with you, that you can provide better access to our
7 hunters, better mitigation efforts for the hardships that
8 a hunter goes through when trying to provide food on the
9 table. That's my biggest concern for this offshore
10 drilling on Lease Sale 193 and why we had to go the length
11 to sue the federal government to get our concerns
12 addressed, our voices heard.

13 And I hope with this new Administration that we
14 can work with the Obama Administration, the federal
15 cabinet members. And thank you for coming up here.

16 DR. JIM KENDALL: Thank you, Doreen.
17 Next. Sir, you are welcome to pass or --

18 MS. EMMA POKON: Emma Pokon with the North
19 Slope Borough. I haven't cleared any comments with the
20 mayor's office, so I'm speaking on my own part, I guess.
21 I just wanted to, I guess, first acknowledge that your
22 meeting process seems to have improved since the last time
23 you were here with the Lease Sale 193 EIS. There wasn't
24 much in the way of information other than what was shared
25 verbally for people who attended the meeting. So I want

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1 to say thank you for bringing maps and some visuals to
2 help communicate with people who are coming to learn about
3 the work that you are doing.

4 And I also want -- was hoping that Sharon, you
5 could clarify quickly. In your presentation you had said
6 that there would be additional NEPA processes for the next
7 stages of the Outer Continental Shelf Lands Act process,
8 and you specifically referred to the exploration plan.

9 In the past, BOEMRE, MMS, the selected NEPA
10 procedure was an environmental assessment followed by a
11 finding of no significant impact. And also the public
12 comment period is somewhat limited in part because of the
13 30-day time limit in OCSLA. So I was hoping, given that
14 you mentioned that in your presentation, that you could
15 follow up on that and lay out maybe the differences that
16 BOEMRE sees in the input process for right now versus the
17 exploration plan stage.

18 MS. SHARON WARREN: Okay. Is that fine?
19 I'll take the time now. Yes. At the lease sale stage, we
20 do an environmental impact statement. And the purpose of
21 that environmental impact statement is that we do tier, as
22 far as the National Environmental Policy Act says, that we
23 can use that document in the later process.

24 So with an exploration plan, if we do get an
25 exploration plan, the NEPA that we use to start out with

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1 is an environmental assessment. That's what we do first.
2 And at that point in time we determine whether or not, in
3 that NEPA review of the environmental assessment, is there
4 any significant effects that we have not already addressed
5 in the environmental impact statement.

6 If we have addressed them in the environmental
7 impact statement, then what we do is what they call a
8 finding of no new significant impacts because they have
9 been addressed in the bigger environmental document. So
10 if we had -- if we find that there are significant effects
11 that we did not address, then what we would do is -- then
12 we would go to an environmental impact statement on the
13 exploration.

14 So it's a tiered process with NEPA because NEPA
15 you do the lowest -- not the lowest, but you do an
16 environmental assessment, and that assesses whether or not
17 you had -- if there is a need to do an environmental
18 impact statement. And like Emma said, when we deem an
19 exploration plan submitted -- so a company submits their
20 exploration plan. We look at it internally, make sure
21 they have all the information that's required by the
22 regulations, and then we deem it submitted.

23 Once that's deemed submitted, there is a very
24 short public time frame that we send it out because the
25 law requires us to either approve it or disapprove it

1 within 30 days. So we have a real short time frame to
2 address that exploration plan. So that is why the public
3 comment period is -- it's usually, you know, a short
4 period of time.

5 We do put out a notice to prepare environmental
6 assessment with the exploration plan because the
7 exploration plan goes out to stakeholders to review. We
8 do do a notice of preparation of environmental assessment.
9 That's the opportunity for individuals and stakeholders to
10 come and provide comments to us. We do not have the
11 environmental assessment out for public review. So the
12 time for the public to get their concerns addressed is
13 when we issue that notice of -- a notice to prepare an
14 environmental assessment. That's the cue to provide us
15 your concerns so that they can be considered when we do
16 the environmental assessment. Does that answer that.

17 MS. EMMA POKON: So there is a possibility
18 at the exploration plan stage that if the agency finds
19 that there were potential impacts that weren't considered
20 at the lease sale stage, that there would be a full EIS
21 rather than just an EA. How would that work into the
22 30-day time limit?

23 MS. SHARON WARREN: Good question. We
24 haven't -- I haven't been there where we had faced that
25 where all the -- and it's just not impacts. It has to be

1 significant impacts. So I haven't -- I don't have that
2 experience on how that would be figured in, so I can't
3 answer that, Emma.

4 DR. JIM KENDALL: We have to work with the
5 attorneys on that.

6 MS. SHARON WARREN: Attorneys and
7 everything else on how to work that into the bigger
8 picture.

9 MS. EMMA POKON: And I guess another
10 follow-up question is, I guess, if you are tiering from
11 the lease sale EIS, when you are looking at the
12 exploration plans, does that make, then, people's thoughts
13 or comments about possible exploration plans relevant at
14 the lease sale stage because of the tiering process?

15 MS. SHARON WARREN: We do look at the
16 scenarios that we have in the final EIS. I mean, we do
17 look at what the -- how many explorations, what the
18 resource and development would be in the area. So yeah,
19 so if people have comments -- not only would we take them
20 at that point in time, but we would also take them at the
21 exploration time.

22 But the approval of the exploration plan is
23 dependent on the environmental review, both, you know,
24 if -- whether or not it's addressed in the EIS that we did
25 prior to it, and then in the document that we are doing

1 specifically for the exploration plan. Because the lease
2 sale EIS is very broad. It doesn't have specifics of
3 where somebody is going to drill. So when we get an
4 exploration plan, that's where we have specific -- where
5 they are actually going to go out and drill, where the
6 well is going to be. So there is additional information
7 there for us to do our NEPA on it we don't have at the
8 lease sale stage.

9 So it's taking -- it's going from a very large
10 program, like from the five-year to the lease sale to the
11 exploration plan. So you are getting finite down to where
12 you are actually talking about.

13 DR. JIM KENDALL: Let's go back here.

14 MR. ELI NUKIAPIGAK: Hello. I'm Eli. I'm
15 a whaling captain from Nuiqsut. I just got through
16 hosting a whaling feed for my people in the Village of
17 Nuiqsut. I'm on the other side in the Beaufort Sea from
18 the Chukchi just around the corner from us. It's all the
19 same Arctic Ocean to me. Whether it's the Beaufort or
20 Chukchi, it's all Arctic Ocean to me.

21 That's the people of the whole North Slope's
22 garden. That's where we hunt and gather food in a short
23 period of time, especially in the summertime when
24 migration of all different marine mammals that come to our
25 area. Some might be lucky to get some, some won't because

1 the climate change is right now. They're talking about
2 climate change right now. It's already started. Our
3 river, Colville River, is now two weeks ahead of time.
4 That's how changing in our river now in Nuiqsut.

5 The first (Inupiat) come around, start to come
6 at least one or two weeks earlier. That's the changing of
7 the migrations, the animals and the land and sea that we
8 depend on.

9 What kind of assurance are you giving me as a
10 subsistence hunter if that full-blown exploration and
11 full-blown barges that will come to our garden and to all
12 the marine mammals that we depend on from one coast all
13 the way up to Canadian border? What kind of federal
14 assurance are you going to give me if something of mass
15 destruction happens like just happened in Gulf of Mexico?
16 What kind of assurance are you going to give me if the
17 marine mammals or the food chain die-off happen? What
18 will happen that you --

19 The traditional knowledge of our Elders are
20 passing away real fast, and yet there is no -- the
21 scientific of the federal government and the Inupiat
22 scientists need to work together to address the need of
23 what -- most and do it right and compromise to help one
24 another so we will have our food on our table once we
25 start, because I have experience in the Beaufort Sea

1 Native ice. We lost three boats, and I was one of the
2 boats that was lost because of boom project. Shell, they
3 do the same thing. Twenty years ago, it's the same thing.
4 Now he's back there doing it -- what will happen now?
5 What kind of assurance does Shell have for our people if
6 something like mass destruction happens.

7 Thank you.

8 DR. JIM KENDALL: Thank you.

9 MR. GEORGE EDWARDSON: My name is George
10 Edwardson. I'm one of the councilmen for Inupiat
11 Community of the Arctic Slope. And to continue where Eli
12 just left, when an animal, bearded seal, polar bear,
13 whale, beluga, when Point Hope misses it, then it
14 continues up to the east and Point Lay has a chance to go
15 after the same animals. And if they miss it, it continues
16 over. Wainwright then has a chance to attempt to catch
17 that -- harvest that for their family. And it continues
18 right on into Canada.

19 This is the migration routes of the seals we
20 hunt, walrus, the whales, polar bear. These are the
21 animals we depend on.

22 And when you look at the Chukchi, you have to
23 look at it from this perspective. You mentioned VLOS,
24 very large oil spill. Okay. Let's look at a very large
25 oil spill.

1 Before we do that, let's look at what happens to
2 oil when it hits the Arctic Ocean. We had a sample of
3 that in the mid 1940s when one of the Liberty ships
4 building the DEW lines ran aground and was about to be
5 destroyed by the waves and the only way they saved that
6 Liberty ship at Lonely was to off-load its fuel, its
7 bunker oil. And then it killed the whole Admiralty Bay,
8 the lagoons, you know, going to the west from Lonely. It
9 killed the whole ecosystem right there.

10 And then when the storm subsided, the oil that
11 was up in the high grounds, 50 years later a storm of the
12 same caliber hit again, and that bunker oil started
13 killing again. See, the problem with oil in the Arctic
14 Ocean is the Arctic Ocean is cold, very cold in
15 temperature. The light ends of the crude oil does not go
16 into vapor like it does in the Gulf of Mexico; the light
17 ends will, you know, disappear. In the Arctic they don't.

18 And just to show you how effective that cold is,
19 cold weather is, driftwood that's been sitting on the
20 beaches for over 100 years, the outside might be rotting,
21 but when you cut the wood inside, oil -- the sap actually
22 starts to flow again. That's how well the cold preserves
23 oil, whether it be tree sap or crude oil. And that's, you
24 know, that kind of danger we have to watch.

25 And when you look at the Arctic Circle -- you

1 see my son-in-law right there with his mike, he's the
2 North Pole, and all the way around is the way the currents
3 flow. And then a piece of ice sitting here in front of me
4 will go all the way around and come back at me in ten
5 years later and another ten years it will come back again
6 if it doesn't flow south between down in the north sea
7 flowing south. That piece of ice don't go in that
8 direction. It continues in a circle. It keeps coming
9 back to me every ten years.

10 Now, if you put a pollutant inside the water,
11 and a very large one, there it is. It's going all the way
12 around in a circle. It comes back at me every ten years.
13 And you saw what happened 50 years later with bunker oil.

14 And looking at that VOL, when you put it in
15 between Siberia and Alaska, in summertime the currents
16 flow north. In springtime -- in springtime that's when
17 the salmon fingerlings hit the ocean and the currents take
18 them up in the north. And looking at a map Oceania had
19 made of the temperature gradients up to 168 miles from the
20 shore going north from Alaska and from Siberia and over
21 160 miles past Wrangell Island north of Siberia, the
22 temperature in this whole area was ideal temperatures for
23 the fingerlings to be in.

24 And those of us that played in that ocean out
25 there in our younger days when we get over 100 miles out,

1 we will run into schools of salmon; sometimes salmon,
2 sometimes other fish, more than one species of salmon in
3 one big school. And I learned the dimensions from the --
4 from the Naval Arctic Research Laboratories' aerial photos
5 of these schools of fish. There was one school of fish
6 eight miles wide and 28 miles long, and these were all
7 juvenile salmon.

8 Just to show you how thick that school is, one
9 of my uncles one time drove his boat into it and could
10 only get about one-fourth of the way in, nine miles out
11 straight out in the ocean in the middle of summer, he
12 stepped out of his boat into the ocean, and he never went
13 halfway up to his knees walking on top of a school of
14 fish.

15 This is that fish that is in the Arctic that
16 goes to the Arctic when the currents in the -- when the
17 Bering Sea froze north in summer. This is the fingerlings
18 that went there. And when they mature, they flow south,
19 start to go back into their rivers where they originated
20 from.

21 A few years back, the Yukon River did not get
22 its fish. And that was the same summer, that same spring
23 that the seismic was done in the Chukchi. And the salmon
24 that was supposed to have been going to the rivers south
25 of the Arctic Circle scattered all across the North Slope

1 and started going into our rivers up here that normally do
2 not get the large masses of salmon. They all were -- the
3 migration of the fish had been changed by the seismic.

4 And just to show you how powerful that seismic
5 was, when they were doing the seismic in the Chukchi in
6 the open water meetings in Anchorage, we learned that
7 seismic being done in Banks Island in Canada had to shut
8 down because the background noise from the Chukchi was so
9 loud they could not do their seismic, do their readings in
10 Canada. That's over 400 miles. What is it doing going
11 straight out in the ocean or further to the west?

12 These have to be considered. These have never
13 been looked at. But that salmon, when it does go into the
14 ocean, the currents do take it up north, and they come up
15 north with their food. And then when belugas start
16 migrating, when the seals start migrating, polar bears,
17 this -- that big school mass is their food. And this
18 usually goes from Peard Bay 50 miles to the west of us to
19 over 160 miles past Wrangell Island up to 200 miles wide.

20 The temperature says this is where that salmon
21 stock is. That's their nursery right in the middle of
22 what you what you are calling the Chukchi lease sale area.

23 Now, that mass of school, that big mass of
24 salmon in end of the '70s and the early part of the '80s,
25 there was an international organization conducted in

1 Seward, Alaska. They called it the Bering Sea Synthesis.
2 And in that synthesis, there were 13 nations that dealt
3 with the Arctic Ocean. And they were explaining, you
4 know, what happens and what happens in the ocean and these
5 schools of fish and the currents that occurred. Right
6 there they showed the Bering Sea as one-third of the
7 world's fish stock.

8 Let's take a look at all the fish on the whole
9 planet earth and give it a factor of one. Okay. Just
10 because it's fish, we will call it one. And then when you
11 look at -- start looking at these school masses, the
12 Bering Sea, you are looking at one-third of the world's
13 stock right there. Then you start looking at the world,
14 start looking around. We end up with the Pacific fire
15 rim. The population has gotten so big they have eaten
16 that fish stock up. That fish is not -- can't barely
17 reproduce itself. That's another third of the world's
18 fish.

19 And then let's start looking at the planet some
20 more, and then over there in the North Sea, there is
21 another third of the world's fish. That one right there,
22 about three years ago I went to Norway for an
23 international organization on the Arctic Ocean and found
24 out there was an agreement between Russia and Norway.

25 When one country fished in the North Sea, the

1 other country did not fish because they understood if they
2 both -- if both countries fished, they would destroy that
3 third of the world's fish. So today when Norway fishes
4 one area in the North Sea, Russians do not fish. The
5 following year the Russians go out. That's the only way
6 they can preserve the next third of the world's fish.

7 Okay. Now, we are looking at all the world's
8 fish: North Sea, the Bering Sea, and the Pacific Rim.
9 Two-thirds of them are damaged. One-third is dead. And
10 in -- in the North Sea, the salmon is no longer
11 harvestable because it's been overfished. But the bottom
12 fish are being negotiated on by these two big major
13 countries. Now, the last third of the world's fish is the
14 salmon and its nursery is the Chukchi. Your
15 responsibility is to make sure not just the lease sales,
16 but what the ground -- what the ocean feeds people.

17 We are looking at the last third of the world's
18 fish. Are you going to let it be destroyed so a couple of
19 companies can profit? I mean, this is something you have
20 to seriously look at when you look at the Arctic Ocean.

21 I could talk all night, but I'll give somebody a
22 chance to say something. And everything I gave you has
23 come in -- I've learned from the United States through the
24 Navel Arctic Research Studies or international
25 organizations, you know, conferences conducted. The

1 numbers I'm talking about are the United States' and other
2 major nations' numbers. And all I'm doing is reminding
3 you of them.

4 And my problem is I've lived here, and the
5 ocean, the animals in the ocean, and my relatives that
6 live up here, we have a very serious problem, and we --
7 that is, we cannot live up here without the food from our
8 ocean. We are stuck with that food. You can't bring me
9 beef and then make me live here and be healthy. I can't.
10 It will not happen. I need that fat from that animal that
11 lives in the ocean. So this --

12 I need your help. We all need your help. So
13 together we can protect the last third of the world's
14 fish. And it's not oil that's going to feed us. It might
15 make us travel faster or a little bit longer, but it's not
16 going to keep us alive. And when you are looking at the
17 last third of the world's fish, which also feeds, you
18 know, the seals I eat, the belugas, the bears, the animals
19 I named, that's what I need. I need their fat. And they
20 get their fat from the salmon fingerlings.

21 And two years ago, NOAA had done some studies on
22 the coast, and they found our coast filled with salmon
23 fingerlings, the fish I was saying that migrated north
24 following the currents. I mean, you are looking at this
25 information. It's not something new. It's something we

1 have all been watching throughout our whole history as a
2 people.

3 There is very few of us up here that live up
4 here that depend on this up here. We want to stay longer.
5 We need our kids to live here after us. They have to be
6 here. And the only way they can do it is to make you, the
7 government, understand. We know legally you can't go
8 selling something that don't belong to you.

9 At the UN, we have also come to understand when
10 the United States says they are going to do something in
11 the Arctic, they always remind the world we are under
12 their custodial care. You are taking care of us,
13 therefore, you can talk about the ocean. The United
14 States has not signed the law of the high seas.
15 Technically speaking, the Arctic Ocean is not yours, it's
16 mine, the people that live here. And I am not ready to
17 have my home destroyed.

18 DR. JIM KENDALL: Thank you, George.
19 James.

20 MR. JAMES PATKOTAK: Thank you. My name
21 is James Patkotak. I grew up here in Barrow, Alaska. I
22 learned how to hunt from the ocean. Like George said,
23 that's our garden out there, and I learned at a very young
24 age hunting oogruk, seal and the whale out there. Now
25 oil industry comes up here and decides to look for oil out

1 in the ocean. Why don't the oil industries stay on land.

2 Here is one concern that had been brought out by
3 the Minerals Management Service before BOEMRE came -- came
4 to be. I remember hearing a concern by one of the -- one
5 of our leaders way back then. In case of a very large oil
6 spill, will the people be provided with food, White Man
7 food? Will we -- will we be provided with necessary food
8 for our table, our children.

9 Now, there are about 10,000 Inupiat on the
10 North Slope alone, maybe more. Now, will the federal
11 government be able to provide us with food each and every
12 day because we won't be able to eat muktuk, eat the seal
13 we like, the oogruk? They are nourishing to our bodies,
14 very nourishing. I myself, even after I have a hamburger
15 and French fries, I'm still yearning to eat some more
16 because it doesn't fill me up. The White Man food don't
17 fill me up as well as our Inupiat food does. So that's
18 been my concern, and also it is a concern of many people
19 on the Slope.

20 Now, will that -- is that -- the EIS -- the EIS,
21 does that -- is it still in there, that concern that has
22 been brought out a while back when this used to be MMS?
23 I'm wondering about that. Look into that, and if you are
24 going to do the supplemental EIS, check it out. Make sure
25 it will still stand. That's all I have. Thank you.

1 DR. JIM KENDALL: Thank you, James. Now,
2 I'm going to walk around here and pass the microphone back
3 to Doreen, and she can start the cycle again. Doreen, you
4 can pass it on if you choose, or add to what you have
5 already said. Make sure everybody has a chance.

6 MS. DOREEN LAMPE: Thank you, Jim. Doreen
7 Lampe, for the record. I'm glad to see that there is
8 finally a provision regarding a scenario for a very large
9 oil spill. Every time there is a presentation given in
10 the past, the presentation usually ends with we don't plan
11 for the event of a very large oil spill because we plan on
12 prevention. Prevention of an oil spill is our plan. And
13 that was such a sorry statement if I ever heard one by an
14 oil company. And I'm very glad to see that the federal
15 government has learned something from the BP Gulf of
16 Mexico oil spill.

17 I don't know how many of you are on Facebook,
18 but I just got technologically challenged with Facebook,
19 and I read a comment on a Facebook that said if there was
20 a very large oil spill in the Chukchi Sea, our housing
21 situation up here is so sorry, so bad for our own people,
22 how are we going to house 30,000 employees that are needed
23 to come up here to clean up the oil spill? That's how
24 sorry our housing is in the Arctic. We don't have no
25 trees.

1 So I'm glad to see that the federal government
2 finally, after 30 years, implemented a scenario in the EIS
3 for a very large oil spill. And I hope that it's taken
4 into consideration very seriously because we have been
5 trying to say over and over and over the oil companies
6 cannot clean up a very large oil spill in the Arctic.

7 DR. JIM KENDALL: Thank you, Doreen.

8 MS. LEANDRA DE SOUSA: I have a question.
9 Can you hear me? Leandra, North Slope Borough, Department
10 of Wildlife Management. But I'm speaking on behalf of
11 myself. And I have a question about the very large oil
12 spill. And what -- so what happens? A lot of the
13 conclusions confirm that it would be huge negative impacts
14 to the environment and to the Inupiat people if there is a
15 very large oil spill, so that's out. That's going to go
16 back to the courts. What's the judge's decision on that?
17 Is there a scenario?

18 MS. SHARON WARREN: It will go -- this
19 document will be used by the Secretary of the Interior to
20 make his decision so, you know, I don't know what the
21 decision will be of the Secretary of the Interior. But he
22 will have all the information before him. And that's why
23 we want your concerns and your positions on there so that
24 we can articulate that in our document to the Secretary so
25 he has all the information before him before he makes his

1 decision.

2 MR. BEN GREENE: All right. I will talk.
3 My name is Ben Greene. I work for the North Slope Borough
4 Planning Department, but like my cohorts here, I have not
5 vetted anything through the mayor's office, so I will be
6 speaking as a private citizen. I'm going to follow up on
7 some dialogue that Emma had. And I really appreciate the
8 answers to the questions and the questions that have to do
9 with significant thresholds for NEPA analysis, when to
10 perform an EIS versus an EA.

11 And this question might sound familiar because
12 it's the same question I asked last time that you were up
13 here in Barrow. And it has to do with, was it the March
14 2010 GAO report having to do with significant thresholds
15 and MMS' -- the agency once known as MMS -- implementation
16 of NEPA. MMS responded to that GAO report policy to come
17 up with a guidance document. I think it was originally
18 due December 2010. And of course, in the meantime, the
19 Deepwater Horizon occurred.

20 Jim, I think when you were up, you stated at the
21 time that that guidance document talking about NEPA
22 thresholds, talking about significant thresholds was
23 imminent. Is it still imminent?

24 DR. JIM KENDALL: I'm not up to speed on
25 it right this second, but my understanding is that it's

1 still moving forward. There are a lot of people working
2 on it every day to make sure it lives up to what is
3 expected. You know, it's something we are taking very,
4 very seriously. As I say, I haven't seen the latest
5 report on it, internal report, that is; but I know people
6 are working diligently to make it happen and to get it on
7 the Web. Does anyone know anything?

8 I'm sorry. We can always get back with you, but
9 we didn't come prepared to answer that question, other
10 than the fact that I have heard people talk about it and
11 people were pushing on it as hard as they can.

12 MR. BEN GREENE: Okay. Good. Thank you
13 very much. I appreciate the update.

14 MR. GEORGE EDWARDSON: Hi again. George
15 Edwardson. What I didn't do is tell you about my
16 education and where I have worked in the past. 1968 I
17 captained the very first cleanup boat that ever came to
18 the State of Alaska. I had to change the system so it
19 would work to pick up the oil in the water. And it only
20 picked up the heavy ends that floated to the top. The
21 light ends, like the gasoline and the diesel and the crude
22 oil and the natural gases from the cold weather, that
23 don't go -- evaporate up in the air, that remained in
24 solution, but the cleanup boat I had captained was for Pan
25 American Petroleum in the Cook Inlet in 1968.

1 In my college education, I'm a geologist. I'm a
2 mining and petroleum technician, and I'm also a certified
3 gas field operator with over 17 years of running a gas
4 field and having worked at Prudhoe Bay from the beginning
5 during the exploration. So I do know the industry and
6 what it does and how it operates.

7 And when you look at my education, it's more
8 than most in the oil industry. I took that education to
9 find a way to try to find a way to protect my home. And I
10 had worked for the -- our corporation, made an engineering
11 firm for them, and was in the process of going after the
12 offshore development. Then I asked the board, if it's not
13 safe, what do I do? They told me, if it's not safe, find
14 a way to stop it and we will be right behind you. And
15 this is 1977.

16 And now we are in 2011, and the knowledge the
17 industry has and the direction they are going has not
18 changed one bit.

19 They claim they study, but where is it? We
20 don't see it. I haven't seen it. Like I said, I have the
21 degrees from the universities that says I'm an oil man.
22 And when you look at VOL, very large oil spill, we all
23 have a slight understanding of the Arctic gyro, how the
24 Arctic Ocean goes around in a circle.

25 One year I came up on one of the barrier

1 islands, and there was a couple of people studying the
2 birds that were living on the island in summertime. They
3 had a drift card, and it was from a university in the
4 northerneastern end of Australia. He showed me the drift
5 card he picked up from the barrier islands. That's less
6 than 30 miles to the east of Barrow. And then he asked me
7 how did this get there. I just happened to have a copy of
8 National Geographic on the ocean's currents, and I showed
9 him how it traveled.

10 It was south of the south -- South America, went
11 on the west side of Africa, went north, west side of
12 Europe north, and then it got in in the North Sea and then
13 made the trip all the way around until it got to the
14 barrier island where it landed. And that drift card had a
15 four-year date on it.

16 And the Gulf of Mexico, we all worry about that.
17 I'm expecting to see that oil to the east of Barrow in not
18 too far in the future. The way that drift card was
19 traveling tells me.

20 And like I said, our Arctic Ocean is cold, so
21 the diesel and the gasoline don't evaporate out of it. So
22 it comes back to me every ten years. And then there is
23 that big nursery between Siberia and Alaska. Every time
24 it comes around, it's going to hit that. And that's the
25 world's fisheries everybody better be worried about. My

1 worries are the whales and the seals. The salmon is your
2 food. I hope we all understand each other.

3 DR. JIM KENDALL: Thank you, George.
4 James.

5 MR. JAMES PATKOTAK: What's -- what's
6 the -- what are the Feds going to do once the oil come up
7 to -- come up to the Arctic that does spill down in the
8 Gulf of Mexico? Who is going to clean it up once it gets
9 up here? Once there is ice out on our ocean, what are the
10 Feds going to do? Do you have a plan? Does the Feds have
11 a plan for that? I'm starting to wonder now.

12 Now, once the lease sales happen and the oil
13 industry goes and buy a spot where they are going to
14 drill, now, will the oil industry keep their word in
15 hiring locals to be out there drilling with them or are
16 they going to say the heck with them, the Natives, saying
17 we are going to drill. We don't care what they say. I
18 mean, what -- that's the -- that's a question that often
19 people ask, you know. What's going to happen? You know,
20 that's a big question. Thank you.

21 DR. JIM KENDALL: Good questions. Mike,
22 if you could walk over to this side of the room. Again,
23 this is a technique we tried in Kotzebue, and we just kept
24 going around until everyone was comfortable that they all
25 had their say. We don't want anybody to leave the room

1 and feel that they got missed or left out. George.

2 MR. GEORGE EDWARDSON: I told them I could
3 talk all night if you were willing to listen to me.

4 DR. JIM KENDALL: And we have got lots of
5 coffee and goodies.

6 MR. GEORGE EDWARDSON: Okay. We are
7 talking oil and gas. We are talking about the Arctic.
8 And you have seen the gyro of the ocean. You see what oil
9 does when it hits, you know, the cold water. The light
10 ends do not evaporate like they do in the Gulf. That's
11 understood.

12 Now, another aspect, we have not touched all the
13 geological and information, biological data you have
14 collected, you know, since the lease sale are now
15 obsolete. You can't use those anymore because of today's
16 term everybody is using global warming. The Arctic Ocean
17 had been under a sheet of ice for the last 28- to 32,000
18 years. That ecosystem had stabilized itself living in the
19 cold water.

20 Now the ice is almost all gone and that
21 family -- that family, that ecosystem now is going through
22 a cultural shock. I call it a cultural shock because the
23 ice is no longer there covering it. And they had -- the
24 microorganisms that live in the ocean have adapted to the
25 cold.

1 Now the heat is hitting them, and on top of it
2 we have this seismic noise, we have this drilling noise.
3 Seismic that when they send off a seismic boom, the ships
4 are falling apart in between their seismic work. They are
5 rewelding the ships over and over.

6 And I'm listening to this from the people that
7 work on the ships. Our marine mammal observers come and
8 tell me when they get off from the boats that in between
9 the seismic works, the welders are busy keeping the ship
10 together.

11 Now, this is supposed to be a harmless boom.
12 And when steel can come apart from the seismic, there is
13 something drastic going on in there someone is not
14 bringing out. And the government is not willing to stick
15 its nose in there to see if it's really for real, even
16 though the other agencies bring out the point that when
17 the seismic boom is set off in the Chukchi, Banks Island
18 in Canada 400 miles to the east cannot do their seismic
19 work because of the background noise.

20 Now, what's happening to all the animals in
21 between? If I shoot a Steller's eider or one of those
22 endangered birds, I'd go to jail for ten years right now.
23 You will not hesitate to lock me up, the Feds won't. What
24 happens to the industry when they destroy whole flocks of
25 them like that? I mean, there is some heavy-duty

1 discrimination going onto me as a subsistence hunter
2 versus, you know, the industry who can make a few dollars
3 for the State and the federal government just because they
4 are willing to pay the State and Feds some money. It's
5 okay to do that kind of damage?

6 The snow geese that used to be in the barrier
7 islands when Prudhoe Bay first started to be developed
8 disappeared from Alaska. In 2000 I was in Alberta in Fort
9 McMurray checking out a gas field operating school over
10 there, and while I was there, the Canadian, you know,
11 wildlife was trying to figure out where all these snow
12 geese came from, and they had already destroyed the
13 summering place of the snow geese, the Canada snow geese
14 because the population had exploded. Did anybody get
15 fined for that? Not a single individual or company.

16 And the snow goose is a very shy animal, and it
17 don't like to stay around people and noise.

18 DR. JIM KENDALL: Again, we are going to
19 continue to go around until somebody does not take the
20 microphone. Making sure everybody gets a fair shake.
21 James is not going to disappoint me.

22 MR. JAMES PATKOTAK: I feel this is a very
23 important gathering for our people. This is our lives
24 that the oil industry -- it's our livelihood. You know,
25 it's very important that we express our -- express our

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1 feelings for our Inupiat people.

2 And I've heard so much negative stuff come out
3 of our local people here regarding the oil industry when
4 they are working out in Prudhoe Bay. When they are out in
5 the ocean, they got these negative reports back to us when
6 we gather in our own little circles now and then. People
7 talk about the oil industry, how the Inupiat are being
8 treated by the oil industry.

9 Now, hopefully, with the industry out in our
10 garden, hopefully our local people get trained to be
11 captains of these drilling ships to keep their ears and
12 eyes out for our local people. Be top dogs in our -- in
13 the oil industry -- one great day, huh? I hope our
14 Inupiat people get to that point and get even more
15 serious, more serious than we are now.

16 With that, I'm going to close. Thank you.

17 DR. JIM KENDALL: Thank you, James.

18 Anybody else wishes to speak?

19 MR. GEORGE EDWARDSON: Let's finish off.
20 Okay. Let me finish it off.

21 DR. JIM KENDALL: Okay. George.

22 MR. GEORGE EDWARDSON: When Trans-Alaska
23 Pipeline was in the process of being built and the EIS was
24 conducted and in that EIS the U.S. federal government
25 guaranteed one major spill in its transportation system,

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1 and it came about 20 years after it had been flowing. And
2 that was the Exxon Valdez. Now, we were guaranteed that
3 spill when the pipeline was in the process of being built.
4 That was a guarantee given and, sure enough, the federal
5 government kept their promise. They had Exxon Valdez.

6 And then when they done -- in the '80s when they
7 first attempted to do their offshore drilling up here in
8 the Chukchi when the first EIS came, we were guaranteed
9 one and one-third major oil spill. Exxon Valdez said you
10 keep your word. Now you guarantee me a one-and-one-third
11 major spill. You have killed the ocean with a one-third
12 spill. Your whole major spill had guaranteed that it
13 can't stand back up again.

14 Now, this is what I'm looking at when I look at
15 the United States and its promises and its EIS. You give
16 us an EIS right here, which we saw for the first time
17 today, and we are supposed to be sitting here commenting
18 on that. And when you look at us throughout the whole
19 North Slope, I don't think there is even two handfuls of
20 people that can read those books and understand what it's
21 saying because we are a subsistence people.

22 What are we going to do? Do we have to secede
23 or what in order to stay alive? We are Americans, just
24 like you are. I have a right to live like the way I want
25 to live, and my parents, going on back, they tell us we

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1 have lived here on this piece of land -- this is the
2 seventh Ice Age we are coming out of, according to the old
3 stories we have. Is this going to be my last ice age?
4 What gives?

5 DR. JIM KENDALL: Thank you, George.

6 MR. JAMES PATKOTAK: One more thing. I
7 wonder if -- I wonder how the oil industry would think and
8 I wonder how the White Man would think if we decide to
9 give them an EIS. I mean, I'll give you an environmental
10 impact statement because you are coming up to our land
11 here. I'm -- we are going to require you to fill out an
12 EIS for us. I wonder how it would turn out. That's all.

13 DR. JIM KENDALL: Thank you, James.

14 Anyone else? I may have to close the meeting a tiny bit
15 early.

16 MR. GEORGE EDWARDSON: I think we got the
17 message through, didn't we?

18 DR. JIM KENDALL: George, I think you got
19 the message through. Thank you. If there are no -- any
20 other -- aha. We were going to close, but if we have
21 another person who would like to speak --

22 MR. GEORGE EDWARDSON: Yes, we would love
23 to speak.

24 MS. QAIYAAN OPIE: Sorry. I was going to
25 drop by and see if anybody was still here.

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1 DR. JIM KENDALL: We are still here.
2 There is time to make a comment, if you would like.
3 MS. QAIYAAN OPIE: Okay. Sure.
4 MR. GEORGE EDWARDSON: Just say it from
5 the heart and let them have it.
6 MS. QAIYAAN OPIE: Okay. Sure.
7 DR. JIM KENDALL: You can have a seat.
8 Have a seat and get comfortable.
9 MS. QAIYAAN OPIE: I'd prefer to stand.
10 Thank you. So I'm Qaiyaan Opie. I am the natural
11 resources director for ICAS. This is my one-year-old
12 daughter. Couldn't find a sitter. Was just stopping by
13 here to make sure if anyone was here. I thought it might
14 have been over, but I'm glad I caught the tail end of it.
15 I know we met earlier today, and I got quite
16 a -- quite a bit, a lot of information regarding the Lease
17 Sale 193. And I did want to comment that since I have
18 been working for ICAS, which has been since about the tail
19 end of November, just last year, so for about six months
20 now, I was really pleased and very refreshed to see the
21 outlay of the presentation.
22 And as I stated earlier with the first question
23 on the board being what are we here for, is a great step
24 in taking that level of communication to these public open
25 meetings to a different level where people do feel more

1 comfortable knowing that they are a part of the comments
2 being made and knowing exactly what the presentation
3 encompasses in that sense. So I really appreciate that.
4 Thank you.
5 I also did want to comment that I know BOEMRE at
6 this point is kind of going above and beyond what the
7 judge mandates in this sense in going beyond to take the
8 extra effort to come and have the community and our
9 agencies involved. So thank you very much.
10 And we do have some comments, and this is on
11 behalf of ICAS here. And I'll just kind of read verbatim
12 here since I don't really have much to say personally at
13 this moment. I didn't quite catch the full conversation
14 here.
15 So first of all, we do thank you for updating
16 the previous supplemental EIS from last fall. While the
17 EIS is much improved, ICAS still does have many concerns
18 about the analysis and whether the lease sale should move
19 forward.
20 Our first point here is the baseline information
21 and that ICAS, it's been pretty well known that we, as
22 well as a lot of agencies, have long advocated that the
23 government must have baseline information about the area
24 of OCS before authorizing work there. The EIS and the
25 recent USGS report both demonstrate that critical

1 information is missing. And we ask that the government
2 ensure it has more information about the Chukchi and the
3 important natural resources before deciding where to sell
4 offshore oil and gas leases in this area.
5 Number two regarding oil spill, we appreciate
6 the updated information on a very large oil spill, VLOS --
7 adding to the list of acronyms that I'm becoming
8 accustomed to -- that is included in the EIS. This
9 analysis shows the very far reaching and devastating
10 impact of a spill in the Chukchi, but does not answer our
11 questions, which are: Are the oil and gas companies
12 capable of cleaning up a spill in Arctic waters with ice,
13 hurricane force winds, darkness, and other challenging
14 conditions? Should they be allowed to explore if they
15 have not shown that they are capable of a cleanup.
16 The next question: Will oil and gas companies
17 have to be able to drill same season relief wells? Also,
18 what will the response time be for such a spill with the
19 nearest Coast Guard office over a thousand miles away?
20 And will the Coast Guard have ice breakers and other
21 vessels to be able to assist in cleaning up a spill? And
22 what will the oil and gas companies and the government do
23 if subsistence resources are not available for Chukchi
24 villages who cannot afford to live off of store-bought
25 foods.

1 Lastly, here is climate change. Comparing the
2 impacts to our climate from the lease sale to a worldwide
3 baseline is not appropriate when our communities are
4 already being impacted by climate change. Our ice cellars
5 here are rapidly melting like they haven't before, and our
6 sea ice is changing. I can very comfortably say
7 dramatically because I recently just turned 30 and I
8 myself consider that old, but to my community and my
9 mentors it's fairly young. But I know that in my life
10 span I have been able to see this happen before my eyes.
11 So it is very real and very here and happening very
12 rapidly.
13 Also we must change our subsistence activities
14 to respond to this climate change and you must address the
15 impacts of climate change here and not just compared to
16 the rest of the world. And also cumulative impacts -- the
17 analysis of cumulative impacts must be expanded. The
18 definitions of past, present, and foreseeable impacts need
19 to be expanded. The geographic range considered needs to
20 be broader for migratory species like the bowhead whale.
21 Significant thresholds. How the environmental
22 impact statement defines significant impacts to different
23 resources is unlawful. You are requiring substantial
24 violations of federal law before an impact is considered
25 to be significant. These definitions need to be rewritten

1 so that significant impacts are recognized before federal
2 law is broken.

3 And more alternatives and a hard look at the
4 impacts are required. We appreciate the inclusion of
5 additional qualification in the EIS on bowhead whales,
6 very large oil spills, and natural gas development. This
7 information has not changed the outcome. This information
8 has not been used to develop a reasonable range of
9 alternatives. This information has not been given a hard
10 look in the analysis. And actual analysis of a reasonable
11 range of alternatives and a hard look at the new
12 information is necessary before leases are sold.

13 And these are some cumulative points that ICAS
14 wanted to make. So I wanted to present that. And I'm
15 sitting here wondering, oh, no, what if somebody was here
16 and already and did that. Have they?

17 MR. GEORGE EDWARDSON: You did good.

18 DR. JIM KENDALL: No, that's fine. Thank
19 you.

20 MS. QAIYAAN OPIE: Okay. Yeah, so thank
21 you very much.

22 DR. JIM KENDALL: Thank you very much.
23 You were going to grab, say something. Anyone else would
24 like to say --

25 MR. GEORGE EDWARDSON: One last time on

1 the Coast Guard. She brought out the Coast Guard. I'm
2 glad she did. We have two super icebreakers that the
3 United States has, and it's only two in the Arctic. And
4 if you have ever watched that TV show The Deadliest Catch,
5 the Coast Guard is working to its maximum where it's --
6 where it takes care of our fishermen down south on the
7 south of where we live.

8 And every time winter begins, the first thing
9 the Coast Guard -- the first things to leave are the Coast
10 Guard, and we don't see them until spring. This has been
11 the habit of the U.S. Coast Guard. This is not to
12 bad-mouth them. Those are very fine people there. You
13 can't ask for better people than the ones that are in
14 there. They leave because they cannot deal with the ice.
15 The United States' so-called super icebreakers cannot
16 handle the ice in winter. They leave. And what have you
17 to replace and allow the industry to stay in winter when
18 the Coast Guard can't even -- don't even have the manpower
19 to stay?

20 And another thing I forgot to mention earlier,
21 we have to deal with the environmental impact statement.
22 We have to deal with the federal government. And our
23 dollars we receive are to do social service dollars, and
24 we cannot use those monies for such work as, you know, to
25 deal with you when you come. You need to put -- you are

1 taking money away from our social services funds, putting
2 us in violation with our contract with the United States
3 in order to attempt to protect our environment.

4 So you, as an agency, better find some dollars
5 for our Native villages and our regional governments so we
6 can deal with such issues as these EISSs. Your EIS, first
7 time we seen it today we are commenting on it. We haven't
8 even had time to read the first page.

9 Now, is that how we do environmental impact
10 statements in the U.S. now?

11 DR. JIM KENDALL: Thank you, George.

12 MR. MIKE HALLER: Other comments?

13 DR. JIM KENDALL: Anyone else? Going
14 once, going twice --

15 MS. RACHEL EDWARDSON: Could you do an
16 introduction, have everybody introduce themselves?

17 DR. JIM KENDALL: That would be an
18 excellent idea. That would be great. My name is Jim
19 Kendall. I'm the Regional Director for the regional
20 office of the Bureau of Ocean Energy Management,
21 Regulation and Enforcement of the Department of Interior.

22 MR. MICHAEL ROUTHIER: My name is Mike
23 Routhier. I also work in the Alaska Region for BOEMRE,
24 and I work as an EIS coordinator, so I help put together
25 these documents.

1 MS. SHARON WARREN: I am Sharon Warren.
2 I'm the program analysis officer in the Alaska Region, and
3 on this project I'm the project manager for the SEIS for
4 the Alaska Region of BOEMRE.

5 MR. CRAIG BLANCHARD: My name is Craig
6 Blanchard. I work for Shell. I'm a SIMOPS coordinator
7 and community liaison here in Barrow.

8 MR. JOHN MAKETA: My name is John Maketa.
9 I'm a contractor for Shell. I'm a logistics consultant,
10 and by trade I'm a marine engineer, so I have -- I told
11 George I did five years in the Coast Guard up here and I
12 worked on the SIDS rig, the SDC. I was a barge master and
13 an engineer, and I worked for Crowley at Caco. So I kind
14 of spent about 20 years up here kicking around. I'm based
15 here in Barrow for Shell, and I can answer a lot of these
16 questions if anybody wants to stop in the office on
17 logistics or local hire issues, too.

18 DR. JIM KENDALL: Thank you. Gentleman in
19 the back there.

20 MR. HAL SALZMAN: Hal Salzman, Rutgers
21 University, just observing.

22 MS. EMMA POKON: Emma Pokon from the North
23 Slope Borough Law Department.

24 MR. BOB MERCIER: Bob Mercier, North Slope
25 Borough search and rescue pilot.

1 MR. SCOTT BLACKBURN: I'm Scott Blackburn,
2 and I'm with the Alaska Region of BOEMRE, as well. I'm a
3 technical editor and writer.

4 MS. QAIYAAN OPIE: Qaiyaan Opie, ICAS,
5 Inupiat Community of the Arctic Slope, National Resources
6 Director.

7 MR. GEORGE EDWARDSON: Again, my name is
8 George Edwardson. I'm one of the councilmen for Inupiat
9 Community of the Arctic Slope.

10 MR. MIKE HALLER: I'm Michael Haller. I'm
11 the community liaison for the Bureau of Ocean Energy
12 Management, Regulation and Enforcement for the Alaska
13 Region.

14 MR. JAMES PATKOTAK: I'm James Patkotak.
15 I worked for ICAS as a natural resource director myself.
16 Currently I am -- I work for KBRW radio station. I'm a
17 DJ.

18 UNIDENTIFIED SPEAKER: I recognize your
19 voice.

20 DR. JIM KENDALL: And with that, if there
21 are no other comments, I would officially like to close
22 this meeting on the public hearing for the revised
23 supplemental EIS. I want to thank you all for coming out.
24 I know there is a whale celebration tomorrow. And I'm
25 really pleased we had some folks here because I know it's

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1 a really important celebration tomorrow.

2 Thank you all for coming, and your input has
3 been invaluable. And have a good evening.

4 (Proceedings adjourned at 8:50 p.m.)
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1 REPORTER'S CERTIFICATE

2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:

4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.

12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.

15
16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska

20 My Commission Expires: November 5, 2012
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24
25

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PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA
BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Point Lay, Alaska

Taken June 28, 2011
Commencing at 7:05 p.m.

Volume I - Pages 1 - 127, inclusive

Taken at
Point Lay Community Center
Point Lay, Alaska

Reported by:
Mary A. Vavrik, RMR

A-P-P-E-A-R-A-N-C-E-S

U.S. Department of the Interior:

Bureau of Ocean Energy Management, Regulation
and Enforcement:

Dr. Jim Kendall
Alaska Regional Director

Sharon Warren
Program Manager

Michael Routhier
EIS Coordinator

Scott Blackburn
EIS Technical Writer and Editor

Michael Haller
Community Liaison

Taken by: Mary A. Vavrik, RMR

BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: Before we do anything
else, I'd like to start off with a blessing. And we are
honored that Willard has agreed to give the blessing for
us tonight.

(Blessing offered by Willard Neakok.)

DR. JIM KENDALL: Thank you very much,
Willard. Well, good evening. Welcome to the public
hearing for the Revised Draft Supplemental Environment
Environmental Impact Statement for 193. That is a
mouthful. I'm not going to give you all the details on
that because we are going to have a little bit of briefing
on that so that we can start everybody off at the same
point.

Now, who are we? In the last couple of
meetings, we have had folks stop us almost halfway through
the meeting and say we are not exactly sure who you people
are. Well, we are from the Bureau of Ocean Energy
Management, Regulation and Enforcement. We are a federal
agency bureau within the Department of Interior. We are
the Feds. We are not the oil and gas industry and we are
not a nongovernmental organization or an NGO. Our job is
to manage the energy and mineral resources on the Outer
Continental Shelf. We are unbiased. That's our job, to

be unbiased.

The whole point of this meeting is to get
information from this community to help us make a certain
document better because that document and the material
that goes with it goes to the decisionmaker. The
decisionmaker is the Secretary of the Interior. He will
make the decision. We don't make the decision. We just
package up the information that people have to give us.
Now, my name is Jim Kendall. I'm the regional
director for the Alaska Region of BOEMRE. Carrying that
chair over there is Mike Haller. Mike Haller is our
community liaison. He helps us make contact with the
communities to make sure your information gets into the
system.

Sitting down there is Sharon Warren. Sharon is
the project manager for this. She's the one that has to
make sure everything works and comes together. Sitting
next to her is Michael Routhier. Michael is the EIS
coordinator. He takes all the pieces and puts it together
from the scientists. And Scott Blackburn is over there.
He was taking names. He is our technical expert and
technical editor. His job to is to make sure all the
information we get from a lot of different people flows.

All right. Now, the other person we brought
with us is extremely important. And that's Mary Vavrik.

1 Mary Vavrik is the court reporter who is taking all this
2 information down. And I am breaking one of the cardinal
3 rules. I'm talking too fast. It's real important that
4 Mary gets this down. So whenever you speak, we are going
5 to ask that you say your name, speak slowly and loud
6 enough with the microphone that Mary can get it. All
7 right?

8 Now, after we have the briefing, we are going to
9 open it up for public comment. And we are going to do it
10 a little bit differently. After we ask if any of our
11 Elders would like to make comments or any of the elected
12 officials, we are going to keep going around the room. We
13 are going to walk the mike around to every single person
14 in the room multiple times so everybody has a chance to
15 speak. You can either pass or make a comment. But it's
16 going to come around again, and you can speak again or
17 pass. We are going to keep doing that until everybody in
18 the room feels like they have said everything they need to
19 say for us. Okay. We don't want anybody leaving this
20 room feeling that their voice was not heard. Okay?

21 Now, with that, I'm going to quit talking, which
22 I'm real good at. I never shut up. And I'm going to pass
23 this to Sharon, and she's going to tell you why we are
24 here.

25 MS. SHARON WARREN: Thank you, and thank

1 you for allowing us to come into your community and
2 provide this information to you and to get the comments
3 from you because it's very important.

4 Why are we here today? We're here because we
5 have a specific document that's back on the table. It's
6 the Revised Draft Supplemental Environmental Impact
7 Statement for the Chukchi Sea Sale 193. And when was the
8 lease sale? The sale 193 was held in February of 2008.
9 We did an environmental impact statement in 2007 prior to
10 conducting the sale. There was six companies that bid on
11 the rights to explore tracts for the oil and gas. We
12 offered 29.3 million acres, and 2.8 million acres was
13 leased. And that was in 2008. And I know today is 2011.

14 So here is what happened. Days before the lease
15 sale, plaintiffs sued to invalidate the lease sale. They
16 alleged that the EIS -- they said that the EIS to the
17 Court did not address the potential environmental impacts
18 that was necessary for us to do under the National
19 Environmental Policy Act.

20 So in July of 2010, the judge ruled that the EIS
21 on most part was satisfactory, but he had three concerns,
22 and he wanted those concerns addressed.

23 The three issues he wanted to address was, he
24 said the agency failed to analyze the environmental
25 impacts of natural gas development, even though there was

1 industry interest in the natural gas and even though we,
2 in our notice of sale, had incentives to the oil companies
3 that if they bid on the tract and issued and got a lease,
4 that they also had incentives to produce the gas after the
5 oil. So the judge said you didn't look at the
6 environmental impact of that part of the process.

7 The judge also said that we failed to determine
8 whether the missing information identified was relevant to
9 the federal regulations. Part of the litigation that we
10 are in, there was an exhibit that was submitted and there
11 was pages of quotations out of our document that we said
12 we had missing information, there was uncertainty, there
13 was unknowns. So when we had that, there is a regulatory
14 process that you must go through to assess and determine.

15 The last one is that we failed to determine
16 whether the cost of obtaining the information was
17 exorbitant or the means of doing so was unknown. So the
18 Court told us that we needed to go back, that we couldn't
19 do anything more until we went back.

20 So what did we do in response to the court
21 order? We drafted a supplemental environmental impact
22 statement to address the Court's concerns, and we came out
23 here on the draft SEIS back in November. Some of you may
24 have been at that public hearing. We came back to take a
25 look and get your comments on the document. We did

1 receive over 150,000 comments.

2 And I'll turn the mike over to Mike so he can
3 tell you what happened next on this.

4 MR. MICHAEL ROUTHIER: So as Sharon was
5 saying, we received over 150,000 comments on the draft
6 SEIS we prepared. And that's in addition to all the
7 public testimony we received going around to all the
8 villages and then down in Anchorage. Many of the comments
9 that we received asked the agency to analyze what would
10 happen if something went horribly wrong and there was a
11 very large oil spill in the Chukchi Sea.

12 As you all remember, this is coming on the heels
13 of the Deepwater Horizon event. Everyone has seen those
14 images on TV. It was and is of great concern to people.
15 We, as an agency, in reviewing the comments, considered
16 what can we do to address some of these concerns, and we
17 decided that the best thing to do would be to prepare an
18 analysis of the potential environmental effects of a very
19 large oil spill in the Chukchi Sea.

20 Now, the term very large oil spill, what does
21 that mean? Well, we have a great group of geologists in
22 our office, and we went to them and asked the question,
23 what is the highest possible flow of spilled oil that
24 could possibly occur in the Chukchi Sea.

25 And so they studied some data, and they

1 basically provided us with a detailed scenario of what is
2 the worst thing that could happen out there theoretically.
3 We then provided that scenario to our scientists, our
4 wildlife biologists, our oceanographers, our air quality
5 experts. And they looked at the scenario and then wrote
6 analysis on what the potential environmental effects could
7 be from such an oil spill.

8 It is important to remember that VLOS is a
9 hypothetical event. It's an extreme case. It's an
10 extremely large spill. And it's not -- it doesn't
11 represent any actual well that a company is proposing to
12 drill. It's just something we are using in our NEPA
13 analysis to inform the decisionmaker of the gravity of
14 these concerns.

15 A very large oil spill, as I just described, is
16 actually a bit different than another term that you might
17 hear associated with our agency or oil and gas activities
18 in general, that term being worst-case discharge. I bet
19 some of you have probably heard that term. Just as an
20 explanation, the term worst case discharge is a specific
21 term found in our regulations, and it's a required part of
22 an exploration plan.

23 Right now we are at the lease sale stage. There
24 is a couple -- there is leases out there, and the
25 Secretary eventually has to decide whether he wants to

1 reaffirm those or cancel some or cancel all those leases.
2 We are at the lease sale stage. If some leases were to be
3 affirmed and if an oil company were to down the road
4 submit an exploration plan, then that exploration plan
5 would include a worst-case discharge.

6 The worst-case discharge calculation includes a
7 lot more information than the very large oil spill because
8 there is a specific company that wants to drill a specific
9 type of well in a specific location going out for a
10 specific type of oil. So a lot of the variables are
11 known. There is a lot more information known. So the
12 numbers might be a little different. This is just a
13 heads-up in case you see this other term come up. And
14 it's the worst-case discharge that is used to inform the
15 oil spill response plan.

16 So in other words, when the company prepares and
17 stations assets to respond to a potential oil spill, they
18 will use a worst-case discharge as the basis for that.

19 MS. SHARON WARREN: So what do we need
20 from you today? We need to have your comments on the
21 Draft Revised Draft Supplemental Environmental Impact
22 Statement. As I said, we were here in November. We took
23 your comments. And we now have another document for you
24 to review.

25 We are looking for your comments. We are using

1 regulations.gov, and the website is here. We also have
2 some handouts over there at the table on how you can
3 access regulations.gov. And then after the break -- yeah,
4 at the break that we will probably take, you can come up
5 and see the maps that we have up on the wall. It shows
6 what the -- what the area is that was the lease sale area.
7 It shows what -- the alternatives, what was some of the
8 areas that was looked at prior to the decision being made
9 on this. So again, this -- this is a decision that the
10 Secretary will be making.

11 So after this public hearing, what happens next?
12 What happens is we will take your comments that you
13 provided us, and we really need them because we really
14 need to make sure that the document and the way we portray
15 subsistence, the patterns, the migratory patterns, is the
16 correct information that we have before us. And we will
17 take those comments that you provide to us. We will take
18 the public testimony, transcripts that we also have. We
19 will go through those to take a look at it to see where we
20 will make changes in the document. And so that what we
21 will have is a final supplemental environmental impact
22 statement that will include the transcripts, will include
23 our response to comments that people have provided us, and
24 also you will know where in the document that changes were
25 made and how your comments were incorporated in the

1 document.

2 Then what happens? We are under a court
3 deadline. We have litigation. Judge Beistline said,
4 fine, you can go out and do your very large oil spill. It
5 is beyond what he asked for in his three concerns, and he
6 said at the time that we really didn't need to hold public
7 hearings, but the agency felt that it was necessary to
8 come out with this document again, back out to the
9 communities to ask them how did you -- do we have the
10 correct information in the document for the very large oil
11 spill. So the judge said, you know, you can go out and do
12 those things, but we want -- he wanted a Secretary
13 decision by October 3rd.

14 And so for us to have a decision so that the
15 Secretary can make the decision by October 3rd, we will
16 finalize the supplemental EIS, and it will be in final
17 form sometime in early September because it has to be out
18 there to the public for 30 days before the decision can be
19 made.

20 Again, this is the lease sale. Whether -- the
21 Secretary can either affirm the lease sale on how it was
22 conducted in 2008 and the leases that were issued; he can
23 modify it; he can cancel the leases. He can -- everything
24 is on the table with this decision.

25 And in the OCS Lands Act, it provides for four

1 processes, the stages in the OCS Lands Act: The five-year
2 program, the lease sale stage, the exploration stage, and
3 the development and production stage. So the decision
4 that needs to be made, even though this document takes a
5 look at what it would be to explore out there in the OCS,
6 the decision the Secretary will make is whether or not to
7 go forward with the lease sale.

8 DR. JIM KENDALL: And when was the
9 document made available to the public?

10 MS. SHARON WARREN: We brought this
11 document out to the public -- notification was on the 21st
12 of May. And we did -- around that time we sent it out to
13 many of the stakeholders. The document was sent out. And
14 then when we went out to the public hearings, several
15 weeks prior to coming to the public hearings, we also sent
16 documents out to the communities so that the documents
17 would be here when we also came here.

18 DR. JIM KENDALL: And the comment period
19 ends, again?

20 MS. SHARON WARREN: Yes. The comment
21 period is July 11th, and we are using regulations.gov. So
22 please provide your comments by July 11th. If you have
23 got any questions, like I said, there is a handout on how
24 to do that. On the last page of the handout there is a
25 telephone number to contact if you have any questions on

1 how to navigate through regulations.gov, and we will be
2 more than happy to have somebody walk you through it from
3 the office.

4 DR. JIM KENDALL: Thank you, Sharon. Just
5 before I forget, we do have an interpreter. What happened
6 to James? James is there. He's offered to interpret for
7 us if we need to. So please, if any of you feel that you
8 want to use the interpreter, James, just tell us.

9 Now, the next part of this is I'm adamant that
10 everybody has a chance to speak and that everybody says
11 exactly what they are thinking. And we will stay here as
12 long as we need to. This is really, really important. We
13 are not the decisionmaker, but we have to take the
14 information to the decisionmaker. And so when we send
15 this package upstairs in Washington, D.C., we want to be
16 able to say we went to everybody we could possibly go to
17 to get the information for you to base your decision.

18 And so that's what's before us tonight. And if
19 you feel you want to think about it, that's fine. We have
20 till July 11th. The document is back there. We have got
21 CDs. It's on the Web. There is time to look at it and
22 give us your comment to improve it.

23 Now we're going to open it up to public comment,
24 and we are not, of course, members of the community here,
25 so I don't know all the Elders. So I would like, first of

1 all, before we go around the circle here, to ask if there
2 are any community Elders that would like to start us off.
3 Would anyone like to volunteer?

4 MR. ROBERT SUYDAM: I'm not an Elder, but
5 I've got a question. Robert Suydam. Typically in public
6 hearings there isn't a chance for questions and responses.
7 Is that how this is going to be run tonight? Are you just
8 taking comments, or will you answer questions?

9 DR. JIM KENDALL: Well, we want to get as
10 much from the community as we can. And we want to be
11 careful. I mean, we could answer some very basic
12 questions, but the fear is if we get too much into a
13 dialogue with one or two people, then all of a sudden
14 there is people around the room who don't have a chance.
15 So simple questions, yes, I think we can answer, but we
16 have got to keep it going. And there is always time --
17 you can call us on the phone. You can send us other
18 questions. But the important thing here is everybody has
19 a chance.

20 So the answer to your question is halfway. We
21 just don't want to have a dialogue with a small group of
22 people and other folks are sitting there wondering when do
23 I get to say my piece. So a little respect for everybody.
24 Bill.

25 MS. SOPHIE HENRY: I have a question. I

1 didn't catch the beginning part. Are you guys -- like,
2 what's your situation? Are you for oil, in the middle, or
3 you oppose it?

4 DR. JIM KENDALL: I'm glad you asked that
5 question. Okay. That same question was asked before at
6 another meeting, and we answered it, and we answered it at
7 the very beginning. We represent the Department of
8 Interior. We are part of the Bureau of Ocean Energy
9 Management, Regulation and Enforcement, BOEMRE, and we are
10 the regulators. Okay. We are not for oil and gas. We
11 are not against oil and gas. The mission we have is to
12 make sure what you think gets to the decisionmaker, who is
13 the Secretary of Interior. Okay. So I mean, my job -- if
14 someone asks me, I don't have an opinion. My job is to
15 get your opinions and your information to the top.

16 MR. WILLARD NEAKOK: Willard Neakok, for
17 the record. Is this the only -- I mean, you say a lot of
18 different other villages. Is it just for the outlying
19 coastal villages that you are getting testimony from, or
20 is it the whole state of Alaska?

21 DR. JIM KENDALL: Basically the whole
22 state of Alaska and anybody else who wants to comment. So
23 far now, we have gotten comments from Florida about this.
24 So it's open to the entire country and anybody else. I
25 think I got a few comments from Canada, but for actual

1 visits, we are visiting the coastal communities up here:
2 Point Lay, Point Hope, Wainwright, Barrow, Kotzebue. We
3 had a public hearing in Fairbanks and we have tomorrow
4 night in Anchorage. We can't visit every place, but we
5 need to visit places like Point Lay.

6 MR. WILLARD NEAKOK: Thank you.

7 DR. JIM KENDALL: Again, before we open it
8 up generally, are there any Elders that would like to
9 speak first? This is really important. And the reason
10 why I like to push that is that I'm a big believer in
11 traditional knowledge or traditional science, if you want
12 to call it that. And my staff and I are working as hard
13 as we can to make sure that we get the traditional aspects
14 of nature and observation and science in the document, as
15 well. So are there any Elders that would like to speak
16 before we start? Any elected officials, like maybe the
17 mayor? Okay.

18 In that case, then, let's start the process.
19 And it gets kind of fun. What side should I start on, or
20 should I start in the middle? I'm going to start with
21 you, Earl, and if you could pick which side to go to.

22 MR. EARL KINGIK: (Inupiaq.) My name is
23 Earl Kingik. I come from Point Hope. I'm a whaler. I
24 belong to a clan called Qagmagtuuq. I work for an
25 organization called Alaska Wilderness League. We have

1 been doing this for a long time. Native Village of Point
2 Hope took the government, took our own government to
3 court, and you see what we come up with. This is what we
4 want to hear.

5 I am here to listen to you guys. I'm not here
6 to make comments, but to listen to you guys and what you
7 guys are saying. And that way, whenever I go to different
8 villages, we will do it better. And hopefully we will
9 have Dr. Kendall give all the comments to everybody.

10 We had over 60 people in Point Hope. To my
11 feeling, 100 percent was against offshore activity due to
12 oil spill and other issues that's in front of them. Our
13 people even decided to go to the coastal plains of ANWR so
14 they would stay away from our ocean we love the most, the
15 garden that provides unity, cultural activity, and
16 everything that's been going on for thousands of years.

17 It is good that Dr. Kendall wanted to listen to
18 you guys. This is your chance, and we want to hear and I
19 want to hear from you guys, too. That will make my work a
20 little easier. Like somebody said, who all is going to be
21 giving comments.

22 I went to Alaska Intertribal Council, 209 tribal
23 organizations. They passed a resolution opposing offshore
24 activities. I went to National Council of American
25 Indians. I asked for their assistance in protecting our

1 ocean due to the fast movement of the Bush era. The Bush
2 era gave us a big headache. Now we are going to have to
3 kind of slow them down, and time-out is called upon them.

4 So this is your chance to open your heart to the
5 garden you love the most, the garden that provides unity,
6 The garden that provides cultural activities throughout
7 the whole community because we are part of the ecosystem
8 here. The ecosystem shouldn't be messed around with.

9 Thank you.

10 DR. JIM KENDALL: Sir, you have the floor.

11 MR. JULIUS REXFORD, SR.: My name is
12 Julius Rexford, Senior. I'm a whaling captain for the
13 Village of Point Lay. I also sit on AEWC as a
14 commissioner, and I sit on -- I sat on the North Slope
15 Borough Wildlife Committee for about five or six years.
16 And we got to look at it like -- we can't look at it like
17 it's not going to happen, the opening of our Outer
18 Continental Shelf for drilling, but we need to talk about
19 stipulations that need to be brought out to the floor and
20 to the BOEMRE staff and personnel.

21 That 60-mile buffer zone is something that needs
22 to be there. I know that these ships will be using low --
23 the lowest grade fuel to get out there and run their
24 operations. We need to put in stipulations on having them
25 use ultra low sulfur fuels to burn in their ships and

1 their rigs and all their little vessels.

2 And another one is there should not be more than
3 one drilling operation at any time, not more than one.
4 And another one is the mud tailings that they will be
5 putting out into our ocean should not be discharged. Zero
6 discharge should be -- there should be zero discharge into
7 our ocean in the event that there will be drilling.

8 And I'll probably talk about more later on. And
9 I'll pass the mike on.

10 DR. JIM KENDALL: Thank you.

11 MR. WILLARD NEAKOK: For the record,
12 Willard Neakok, father, husband, grandfather, hunter,
13 alternate planning department for the North Slope Borough.
14 I am in opposition of, you know, any kind of offshore
15 drilling because, you know, like it was mentioned earlier,
16 you know, if we have a very large oil spill, you know, we
17 lose everything in our ocean: Plankton, fish, seals,
18 whales, walrus, whatever marine mammal that is out there
19 because we live off of those animals. It keeps us warm
20 during the winter. You know, we -- we do not waste any of
21 that food that we get from out there.

22 You know, I wrote a comment -- I wrote a letter
23 in opposition to the Anchorage Daily News and, you know, I
24 got a lot of feedback from a lot of different people
25 saying that, you know, I'm not, you know -- that I'm not,

1 you know, trying to find, you know, fossil fuels to keep
2 our homes going, cars and everything. I never even
3 mentioned about that. I know we need the fuel. I know we
4 need the fossil fuel to keep our businesses going, our
5 lives.

6 And, you know, what can we do on land first
7 before we go out to the ocean because we have ocean
8 currents that go all the way down to Bering Sea. And it's
9 going to affect any kind of marine life that is in there
10 if we have a very large oil spill.

11 You know, Prince William Sound is still trying
12 to recuperate. But if you dig down a foot deep in certain
13 areas, you will still find oil. And what happened in Gulf
14 of Mexico, how many millions of gallons was, you know,
15 pouring out into the ocean? Took them four months to
16 finally cap that thing off, or close to four months. You
17 know, if we have it here, we lose our wildlife, our
18 culture of hunting, whaling, fishing. We lose everything.
19 That's scary.

20 I want my kids, my grandkids -- like I stated,
21 you know, in the Anchorage Daily News, I want them to
22 enjoy what I have enjoyed while living here in Alaska in
23 Point Lay. I want them to taste the food that I have
24 tasted, I have hunted, I have given out, I have shared. I
25 want my grandkids and possibly my great-grandkids, too, to

1 enjoy the things that I have enjoyed because if we have a
2 very large oil spill, you know, we lose everything.

3 The whales live off the krill. And those are
4 little, tiny creatures. If we lose those, we lose the
5 whale. We have beluga. We have fish. The belugas eat
6 the fish. The fish eat smaller fish, and so on and so
7 forth all the way down to the planktons, micro-organisms.
8 We have wildlife. We have seabirds comes from as far as
9 Argentina, South Pole coming up this way to migrate to
10 be -- you know, repopulate. And we lose those, too. But
11 mainly, you know, from the ocean. If we have a large oil
12 spill, we lose everything, our way of life.

13 And if we do that, then, you know, we have to go
14 to our local store to try and substitute the food that we
15 have hunted for generations, from generation to generation
16 that was passed down by word of mouth. No documented
17 things like that on the board on how we do things.

18 Our Elders taught us how to hunt, how to take
19 care of the ocean, how to take care of the animals on the
20 land. We have a wonderful state. We have a wonderful
21 village. We have a wonderful way of life.

22 If we lose our ocean, you know -- I don't know
23 how many times I might have to say this -- but we lose
24 everything. And if we start -- you know, the way that
25 global warming is going, pretty soon we are going to have

1 ships coming from Atlantic Ocean coming this way. They
2 will be using that Northwest Passage. What about them,
3 that discharge, you know, their waste, their oils? And
4 what if we have a ship, you know -- we are going to have a
5 coastline, you know, full of ships in another 100 years or
6 so. Just like what we see down there in the Lower 48, go
7 all over the world, we have ships. If we go up north or
8 down south, start seeing ships run aground, getting rusty.

9 You know, that's a scary thought. I don't want
10 my grandkids or great-grandkids or even my kids to see the
11 devastation that we might have if we say go ahead and
12 drill. Before we pass on, we are going to ask ourselves,
13 why did you guys say yes for them to go and drill? Now
14 our ocean doesn't have any life in it.

15 We have currents that, like I said, every
16 coastal village and here on the west side of Alaska is
17 going to be affected by, you know, if worst-case scenario
18 have an oil spill like the one in Gulf of Mexico. We'll
19 have tar balls floating all over the place, washing to
20 shore. That's an ugly sight to see all those people in
21 Florida, Louisiana, seeing tar balls washing up. Do we
22 want that? I know I sure don't. Even my great-grandkids
23 might even see tar balls keep washing ashore. We will
24 start smelling the oil like in Prince William Sound. Walk
25 around, start smelling that oil that seeped into the

1 ground. And that's a scary thing to think about. But the
2 most scariest part is we lose everything.

3 I love the way I have lived before, hunting,
4 fishing, subsisting off the ocean, that the ocean has
5 provided for us Inupriats. We are all up and down the
6 Alaska coastline. I'm grateful that hopefully, you know,
7 our Secretary of Interior will listen, understand what I
8 want to see in the future: Clean ocean, our wildlife
9 still out there.

10 I know that global warming is making our ice
11 thinner and thinner, thinner every year. Pretty soon we
12 might not even have a North Pole. All it will be is just
13 magnetic north, no ice.

14 A lot of things are happening globally, and we
15 see it up here first. We see things that are going on at
16 Prudhoe Bay, all over the world, oil spills, oil spills,
17 devastation of animals. Might bounce back another 50 or
18 60 years, but that's like 50 years of just going to the
19 store, go buy pizza or chicken or whatever, not the food
20 that we have enjoyed for thousands of years living off the
21 ocean, our garden. It's scary, real scary. I want my
22 grandkids to, you know, enjoy the foods that I have
23 enjoyed, enjoy the way of living, hunting, fishing,
24 subsisting the way I have enjoyed it.

25 I better pass the microphone on. I get carried

1 away because I don't want to see offshore drilling. We
2 see oil companies say zero discharge, zero discharge.
3 Looks good on paper. Looks good when they talk to us but,
4 you know, we still have oil spills by pollution or human
5 error. And that's their way of saying zero discharge,
6 still having oil spill.

7 I'm grateful that, you know, hopefully our voice
8 will be heard. Hopefully that, you know, Secretary of
9 Interior will think about the statements that are going on
10 right now, testimonies throughout Alaska or throughout the
11 world regarding the Outer Continental Shelf plans to drill
12 in the Chukchi Sea, in the Arctic Ocean.

13 So I'm glad that you folks are here. And I'll
14 pass it on. Thank you.

15 MR. WILLARD L. NEAKOK: How do I follow
16 that? I'm in the same position as my dad. First of all,
17 my name is Willard Neakok, and I have no see -- no
18 representative. I represent nobody. I just wanted to
19 represent the Village of Point Lay. Our people are
20 fighting people, and we have had to fight for our land.
21 We have had to fight for our animals, and now we are
22 fighting for our ocean. So why stop now?

23 I mean, the reason why we go hunting is, like my
24 dad said, we love the food. We love doing all that. And
25 I may -- I'm one of the leaders -- drum leaders for our

1 community, and I love it. I love it with a passion. And
2 you know, that's one of the ways that we celebrate for
3 successful hunting and celebrate life. And so I am in no
4 position supporting offshore drilling.

5 MS. MARIE TRACEY: I'm Marie Tracey from
6 the Native Village of Point Lay. I work for our mayor's
7 office as a communications liaison for the Native Village
8 of Point Lay, and I'm a volunteer fire fighter and a
9 volunteer ambulance crew member, and I'm a coordinator for
10 the volunteer search and rescue group, and I'm the ASTAC
11 director. I'm a mother. I'm a grandmother. I'm not
12 supportive of the drilling offshore, and I wish that they
13 would try and drill onshore before they try to drill
14 offshore.

15 And with that global warming that we have been
16 witnessing, last fall we had thousands and thousands of
17 walruses off our beach. I was born in the old site on the
18 sand spit across there. And about one mile north of the
19 village on the beach to our 11 miles, maybe at least ten
20 miles up the beach was loaded with walruses. And then
21 when you look out -- out to the ocean, there is thousands
22 and thousands out there. And if you see our walrus
23 picture, the walruses, when they come on land, they are
24 right next to each other, real crowded and everything.
25 And that's how they were coming up on the beach.

1 And when they ran out of beach, the sandy beach,
2 they were being pushed up on the land, you know, with more
3 walruses coming up on the sandy beach, just really
4 crowded. And you could hear them. And when you look out
5 in the ocean, you know, the blue ocean, green ocean, you
6 would see nothing but like brown spots, brown lines at the
7 distance, there is so many walruses out there.

8 If there is a stampede, then you could hear
9 their mourning, their loss of a loved one. It's really
10 sad to hear. And but when they came in, they were so loud
11 that the next morning I was talking with my cousin. She
12 said, boy, I couldn't sleep last night. My neighbors just
13 like they were quarreling all night. I couldn't sleep. I
14 told her those were the walruses out there making noises.
15 She said, oh, my, I thought they were my neighbors.

16 Anyway, but -- and then we have our beluga
17 harvest that we have that we depend very huge, hugely on.
18 We have our biologist, Robert Suydam here. He comes to
19 tag our beluga, and then when he tags them, he set them
20 free, and then they would monitor them because they would
21 have satellite tags on them. And then when he gets
22 information, he would give it to us, and we would see
23 where the beluga go, you know, because they are tagged.
24 And it's amazing to see where they go because we have
25 never had this information before. And since Robert

1 Suydam has been here, we have gotten a wealth of
2 information about beluga. And they take samples.

3 And now we have a loon study going on. Daniel
4 Rizzola from UAF Fairbanks has been coming here for three
5 years to tag the loons, and he would also send us
6 information. It's amazing where these birds and where
7 these mammals go. And I would like to keep this going
8 because we are getting a wealth of information from these
9 people that come in to our village.

10 And Robert Suydam is getting old with us, too.
11 And he's bringing his wife, here, too, which is great.
12 But I would -- I would discourage drilling in our ocean
13 because we have hardly had any caribou around our village
14 and that moves our meal from, like, caribou meat which I
15 grew up with as a main course of our meals, like
16 dinnertime and even lunch.

17 And especially, too, when our young ones go out
18 hunting or else we have searches like during the winter,
19 we would have some food for them, you know, like dried
20 meat and oil and all kinds of food so they could have food
21 out there when they go out. And sometimes we search for
22 days, and it's miles and miles of travel looking for
23 people and hoping to take them home alive. It's just so
24 hard for us up here, but we love our food.

25 We would like to ask our Secretary of State

1 [sic] Salazar to please walk in our shoes, help us keep
2 our way of life, please. This global warming is really
3 hard on our walruses because they have to leave their
4 young and travel hundreds of miles out to sea where they
5 feed, and then they would have to come back to their young
6 ones because there is no ice to rest on out there.

7 Anyway, I'll pass this on to Mrs. Suydam until
8 the next round. Thank you.

9 MR. ROBERT SUYDAM: Good evening. My name
10 is Robert Suydam. I'm a wildlife biologist with the North
11 Slope Borough Department of Wildlife Management. I've
12 lived in Barrow for about 21 years now, although Point Lay
13 is kind of my second home and the folks here are my second
14 family, that we have been working together a long time to
15 learn more about belugas.

16 And Marie, thank you for the nice things that
17 you have said but, you know, much of the credit goes to
18 the community and the hunters here for helping all of the
19 scientists -- not just me, but the others here in the room
20 and others not here -- for the successes.

21 I'd also like to say thanks to Jim and the rest
22 of the BOEMRE crew, BUMMER [pronunciation] crew, whatever
23 it is. Thanks for coming to Point Lay and thanks for
24 coming to the other North Slope villages to ask the
25 residents here about what their concerns are, about -- ask

1 them about what they think about this EIS. Several people
2 have already said that it's -- we hope that Secretary
3 Salazar actually listens to people here that are more
4 directly affected by the actions associated with this EIS
5 than most other people in the country. So because they
6 are -- the risk is greater for folks here -- the benefits
7 aren't necessarily greater, but the risks are -- that the
8 opinions and attitudes and concerns should carry greater
9 weight. And hopefully the Secretary will listen closely
10 to the things that people say here.

11 Jim, I'd also like to say congratulations to you
12 for your appointment as the state director. I think you
13 are a good addition to Alaska and the agency here.

14 DR. JIM KENDALL: Thank you.

15 MR. ROBERT SUYDAM: So welcome.

16 DR. JIM KENDALL: Thanks, Robert.

17 MR. ROBERT SUYDAM: I have a few things to
18 say, and maybe I'll say just a couple of them now to start
19 with. And maybe I'll start with something that Marie was
20 talking about, which was science and the need for
21 information. And I know that part of your revised
22 supplemental EIS was about identifying information that
23 was needed and how much it cost.

24 And I haven't had a chance to review that
25 section of the EIS yet, but I think it's really important

1 to highlight the need for information and using that
2 information to make decisions that I have been surprised
3 to learn the lack of information in the Gulf of Mexico
4 and, with the Deepwater Horizon spill, the limited ability
5 of agencies to understand potential impacts or assess
6 impacts, especially to marine mammal populations.

7 There is so little information known about the
8 population size or status or health of those marine
9 mammals that being able to assess what the impacts were is
10 very restricted, very limited. And so I think we are in a
11 little bit better position up here that we know a lot
12 about belugas, we know a lot about bowheads and walruses
13 and other things, but there is still very limited
14 information.

15 And so encouraging the agency not just to
16 evaluate what information is missing, but also make --
17 continue to make efforts -- I know you have made great
18 efforts here recently, and especially in the last five or
19 ten years, to help fill some of the data gaps, but please
20 keep doing that. Keep funding studies. Keep funding
21 studies to document traditional knowledge. You know that
22 many of the people in this room know more about the
23 environment than any scientist or manager. So your
24 identification of traditional knowledge as being key in
25 making decisions I think is really valid. And I hope the

1 agency is able to continue to do that.

2 As you evaluate comments on your EIS, please
3 first take a look at the data gap analysis that USGS
4 recently did. And I think that's a pretty extensive
5 document, and it may be difficult and challenging for the
6 agency to incorporate that in the EIS, but I think it's
7 really important. It's available information about data
8 gaps, and please use that to make your EIS here more
9 complete.

10 So again, just emphasizing the need to use
11 information to make decisions, I think that's really,
12 really important. But I think there are some other things
13 that are also important.

14 In the document you talk about thresholds and
15 when a threshold is reached, that then the impact becomes
16 significant. On page 75, I think it is here, of the
17 document, you say that -- that "a significant effect on
18 subsistence harvest patterns occurs when one or more of
19 subsistence resources become unavailable for a period of
20 one to two years."

21 So essentially the way I read that is that you
22 are telling Point Lay and Wainwright and Barrow that if
23 the actions that result from this EIS could make
24 subsistence resources unavailable for a year or two, if it
25 was less than that it wouldn't be significant, but if it's

1 more than that it would be. And I think that's
2 inappropriate.

3 I think that if the actions resulting from this
4 EIS cause subsistence resources to be unavailable for two
5 months or two weeks is significant and inappropriate. And
6 so in this document, previous EISs and future EISs, I
7 think you need to change the thresholds that you use for
8 evaluating significant impacts, that the culture, the
9 people that live in these communities rely on subsistence
10 resources. The unique culture that is here is incredibly
11 valuable, and saying that it won't be a significant impact
12 unless belugas or bowheads aren't available for two years
13 is just not right and something -- the agency should
14 approach things differently than that and revise this EIS
15 and make sure that future EISs are done differently.

16 I'll pass the mike on for now.

17 DR. JIM KENDALL: Thank you, Robert. It's
18 great to be in Alaska. My wife is packing up the house in
19 Virginia right now.

20 We are going to go around this way now and work
21 our way back. Okay? I have a nice group of people here
22 in a circle. Would anyone like to take the mike?

23 MR. DANNY PIKOK, JR.: Thank you. And
24 thank you for coming to Point Lay and helping our way of
25 life. And for the record, my name is Danny Pikok, Junior.

1 And I am against offshore drilling, any offshore activity
2 because it's -- it's not just the oil spill I'm afraid of.
3 It's the noise pollution. And I'd like to see oil
4 companies exhaust the land before they decide to do any
5 offshore drilling of any energy resources.

6 And I'd like to see the oil companies focus on
7 natural energy. They are spending too much money to start
8 drilling offshore in the Arctic. They should spend their
9 money looking for alternative energy. I mean, just look
10 what happened in our oil field. We struck oil, it was a
11 big deal, and now it's gone. We had all that oil, all the
12 gas, all the jobs.

13 It spoiled Native way of life. We are spoiled
14 now. I mean, look -- you go look in the beach, the motors
15 are too big. They burn too much gas. We get spoiled.
16 It's -- it's not good for anybody to get spoiled like
17 that.

18 And it's getting worse. And I'm afraid, you
19 know, we are going to start pushing for offshore drilling
20 because how are we going to run them big motors. It's --
21 it's left or right; do you want to choose to go back to
22 old ways, or you want to choose to keep running that big
23 motor and start drilling offshore? Just -- just noise
24 pollution is bad enough for the ocean up here. There is
25 too much wildlife, and a lot of folks depend on it. I

1 depend on it. Our children depend on it. It's just --
2 it's going to do a domino effect. It already has. It
3 started in Prudhoe Bay and now it's working this way.

4 And I'd like to see alternative energy resources
5 like the coal, natural gas. I don't want to see oil rigs
6 floating in the ocean and drilling. I'm against it. It's
7 just too much -- it's -- it's too much -- it's too risky.
8 It's very risky.

9 Just like Willard was saying, it's going to
10 start small and it's going to grow. If we start offshore
11 drilling, we are going to invite other shipping industries
12 up here and start a highway, and we are going to lose a
13 lot of good resources our ocean offers. It's just -- I'm
14 really against any offshore activity.

15 And I mean, I grew up -- when I was growing up,
16 I remember riding in a skin boat, two horsepower motor.
17 That was good enough to get you there and back. You don't
18 carry 50 gallons of gas. You carry five gallons. Today
19 it's -- it's getting out of hand. Just even snowmachines,
20 four-wheelers, they are getting bigger and they burn gas.
21 And we need gas. I know there is oil out there inland.
22 Focus on that oil inland. Exhaust that oil before you
23 start pushing offshore.

24 And I love my family. I love my people, our
25 people. And the way things are going now, it's getting

1 worse, and I want to encourage whoever is going to decide
2 to say yea or nay on offshore, please consider the folks
3 that live up here. And I'm sure there is other
4 alternatives besides offshore drilling.

5 Thanks.

6 MR. DELBERT REXFORD: Good evening. My
7 name is Delbert Rexford. I'm an elected official of the
8 Inupiat Community of the Arctic Slope. I have the
9 at-large seat for the Regional Tribal Council, which is a
10 federally recognized tribe. Very briefly, we just came
11 from a four-hour seal hunt. We got one seal, not too much
12 fat on it. And as Marie alluded to earlier, some of the
13 global warming effects are affecting our marine mammals,
14 the health of our marine mammals. The emissions into the
15 atmosphere globally, not just in Prudhoe Bay or where --
16 anywhere in the world within the industrial global
17 community contributes to all of that.

18 When the draft EIS came and addresses threatened
19 species or endangered species -- bearded seals, seals,
20 polar bears, walrus -- these are the cornerstones of our
21 cultural way of life, including the bowhead whale. In
22 1977 when they banned whaling, it was the International
23 Whaling Commission, without knowledge, without
24 acknowledging Inupiat traditional knowledge said, no,
25 there is not enough whales. But since time immemorial

1 through oral history, we knew there was more whales, but
2 there was no database, no scientific database, as Robert
3 is aware of.

4 The concerns that we have offshore is that the
5 equipment -- I'll take you back to 19 -- when the three
6 gray whales were stranded. The oil industry and their
7 state of their technology tried to save the whales. Lo
8 and behold, they couldn't, not with the state of their
9 technology that they propose to use on cleaning up oil
10 spills. It failed, grossly failed. So it would have been
11 a detriment to take that equipment out to sea, out to ice
12 and try to clean up an oil spill.

13 And we make good friends with the Russians when
14 the Russian icebreaker came and freed the whales. A
15 simple icebreaker allowed the global phenomenon of three
16 gray whales to be expended to be saved.

17 The point is the industry has not proven that
18 they have the technology to clean under ice. And the
19 present technology is limited to certain height of wave
20 lengths. Those are limited. The booms are limited.
21 The -- the oil spills in the Gulf, the Exxon Valdez are
22 testaments to the fact that in a major -- and you talk
23 about a VLOS of 150,000 barrels. I don't know what that
24 equates to in terms of gallons of oil. It underlies the
25 technology is not there. The zooplankton, the

1 micro-organisms, will be first affected up and down the
2 food chain.

3 I mean, that's what we are concerned about, our
4 way of life versus providing national energy to
5 350,000,000 people who are driving on highways, who have a
6 lower cost of living allowances all across the nation.
7 One gallon of milk is nine bucks in Barrow; \$9. The cost
8 of living is high.

9 Danny alluded to the size of the engines
10 emitting a lot of gases. It's inevitable that they get
11 larger. We will consume more.

12 Inupiat Community of the Arctic Slope filed a
13 lawsuit in opposition of the offshore -- of offshore
14 drilling on the Chukchi Sea because of the pollutants that
15 would be emitted into the atmosphere, because of the
16 noise -- cumulative effects of noise pollution and other
17 cumulative effects.

18 And as BOEMRE is aware, they had to go back, and
19 that's why we're here tonight, because of that litigation.
20 Very simply, it was that litigation that brought you back
21 to the communities because at the time MMS did not do
22 their homework.

23 So we came back from a four-hour hunt, my nephew
24 and his girlfriend. We just got back. And to us, it's
25 Eskimo heaven. It's where our spirituality is -- is

1 completed. What we can't get here on the land we get from
2 the sea, the marine mammals that we are concerned about,
3 about being devastated in the event. And this is what
4 bothers our people. In the unlikely event of an oil spill
5 is the term used in a lot of these environmental impact
6 draft statements. If it was inevitable, what technology
7 do you have to clean it up?

8 When you look at the migratory -- what's that
9 guy's name that sends us those bowhead whale migration
10 maps?

11 MR. ROBERT SUYDAM: John Citta.

12 MR. DELBERT REXFORD: John Citta sends us
13 e-mails regarding the route. When you look at the
14 migration, it's right there in Lease Sale 193, right smack
15 in the middle of it. What has BOEMRE done to consider
16 that part of it, to mitigate any chances of adverse impact
17 on bowhead whales?

18 The community of Point Lay just went through a
19 very historical past three years. They just reactivated
20 bowhead whaling. They just landed their second whale.
21 And they are a whaling community. Not only that, the
22 beluga -- to me it's the beluga whaling capital of Alaska.
23 I mean, it is -- every time I come down here for beluga
24 whaling, I'm at home because I don't go home empty-handed.

25 And that's the culture that you are -- that you

1 are endangering through potential VLOS, very large oil
2 spills. That's the threat that we are afraid of. That's
3 an unknown that we are afraid of.

4 In 1977 when the IEWC banned whaling, the
5 analogy we used was that the buffalo was taken away from
6 the Native American Indians. Well, in 1977 they took our
7 bowhead whales off, and suicides. The number of suicides
8 that occurred in those few years after that were -- were
9 astronomical. I mean, people lost a sense of
10 spirituality, a sense of wholeness, a sense of belonging
11 to their own land and to the sea that provided for them.

12 So whoever makes that decision to go offshore --
13 I attended in Houston the Outer Continental Shelf policy
14 meetings, and we encouraged impact hunting to those
15 impacted communities. The federal government has only one
16 impact program that they ever created on the North Slope
17 within NPRA. Those were the NPRA impacts. We went to the
18 Outer Continental Shelf Policy Committee and asked for
19 impact funds to come back to the impacted communities.

20 Impacted communities include suicide, alcohol
21 and drug abuse, and other social norms that go way out of
22 line.

23 And these things BOEMRE, I don't believe, have
24 considered at this stage because if you have, we would
25 like to see what you are offering to the community in case

1 of an oil spill.

2 But I'm speaking on behalf of Inupiat Community
3 of the Arctic Slope. I serve on the tribal council. I've
4 also served on the Arctic Energy -- Arctic Environmental
5 Strategy Protection -- the strategy and the Arctic
6 monitoring and assessment program within the confines of
7 Inuit Circumpolar Conference as a delegate, as a delegate
8 to the United States of America. And these issues that we
9 are asking and concerned about tonight are the same issues
10 that we address at the international forums, at the
11 international regimes, that the Arctic nations, the eight
12 country nations regulate within each respective state.

13 But I just want to emphasize that we do oppose
14 offshore drilling. Inupiat Community of the Arctic Slope
15 passed a resolution opposing it because of the unknowns of
16 what would happen on our ocean if an oil spill like the
17 VLOS that you have noted should happen because we have
18 three currents.

19 Up in Barrow -- I can talk about Barrow. I'm
20 not sure about right here. Up in Barrow we have three
21 currents. They go north, they go south. And every
22 species of wildlife would be affected by an oil spill if
23 it should occur. How many gallons is 150,000 barrels?
24 Can -- what's -- does anyone know?

25 DR. JIM KENDALL: It's about 40 gallons to

1 a barrel.

2 MR. ROBERT SUYDAM: About four-and-a-half
3 million.

4 MR. DELBERT REXFORD: Four-and-a-half
5 million gallons? My lord. Do you have the technology to
6 clean that up if it happens under your theory of a VLOS?
7 I don't think you have a plan. You don't because, like I
8 said, the industry tried their equipment to rescue the
9 three gray whales, the stranded three gray whales, and all
10 of their equipment failed. That's a living testament that
11 the technology didn't work that they were proposing to
12 take out to the sea.

13 Well, I've taken a lot of your time. I tell you
14 what. You should spend time out in the ocean. Maybe you
15 can appreciate it and love it just the way we do if you
16 get a chance to get out there. There is no mosquitoes out
17 there.

18 But thank you. I'm speaking on behalf of the
19 Inupiat Community of the Arctic Slope, and I serve with
20 Sophie on that tribal council. I've taken a lot of your
21 time, but those are the concerns that we have. Thank you.

22 MR. LEO FERREIRA: Good evening,
23 everybody. My name is Leo Ferreira, III, for the record.
24 So we're here to discuss stipulations that need to be
25 implemented into this BOEMRE. Point Lay would like to

1 have a 60-mile buffer zone instead of -- I'm pretty sure
2 it's standing at 15- or 13-mile buffer zone. We want to
3 move that up to a 60-mile buffer zone, not just for Point
4 Lay, but for the rest of the outlying villages in the
5 Arctic Circle.

6 We also want another stipulation of one drill
7 rig -- one oil ship, drill rig up here in the ocean, and
8 also zero tolerance of cuttings and mud in the ocean,
9 along with the oil, zero tolerance of oil discharge.

10 These reasons are for the disturbance of our
11 animals. We have -- right now Point Lay is dealing with
12 disturbance of our tutu migration, our caribou migration
13 route. We have we have had a coal mine going for a while,
14 and all the helicopter use with coal mining has pushed
15 away our migration route. We haven't seen our migration
16 route come back close to the village at all in about five
17 to seven years now.

18 And we just shut down the coal mine just not too
19 long ago in our -- I think it was when President Obama
20 went green finger on us. So we feel the impacts of
21 disturbance.

22 And we also know that our animals in our ocean
23 are very sensitive to noise. I could use walrus as an
24 example because walrus are disturbed by even smelling
25 cologne or smelling cigarettes in the air. If somebody is

1 upwind and they smell their cologne, they are going to get
2 disturbed. They also get disturbed by noise when you
3 are -- when you are kind of close to them, you will
4 disturb the walrus by noise, too, also, but mostly by
5 smelling when they are out of the water.

6 We also have seen a few animals that we never
7 seen before so much, like we seen a killer whale a couple
8 years ago, and that was during when we had ship activity
9 up here. So we see -- so we take that as a disturbance
10 from all the ship activity that was happening in the
11 Chukchi Sea and the Beaufort Sea over there further down
12 south from us.

13 And all of us -- all of us people that live on
14 the Slope, all of us Natives in Alaska been taught our way
15 of life, so we have a lot of traditional knowledge to pass
16 on to the government so they could help get a better
17 understanding of how we want to live our life because we
18 have to give up for oil drilling activities, so in return
19 we want to protect our way of life. We want the federal
20 government to start listening to what we have to say and
21 start putting these things down as our stipulations to
22 help protect our way of life, like the 60-mile buffer
23 zone.

24 And maybe another one would be like when we go
25 harvest our bowhead whale, we would like no ship activity

1 during our harvests or no air activity along with our
2 beluga because our beluga is very sensitive to noise
3 activity in the ocean from the ships and from sonar
4 activity.

5 And that's a big concern is all the activity
6 that's going to happen. We are not just going to deal
7 with oil ships. We are also going to deal with Coast
8 Guard ships. And they have helicopters, too.

9 And the other thing I heard is that if there is
10 going to be a port site, if and when this oil drill does
11 happen in the state of Alaska, I'm most definitely
12 positively saying that our way of life will definitely be
13 disturbed because we are going to disturb our migration
14 route for our whales, bowhead whales, beluga whales and
15 the walruses. The migration routes for these animals are
16 going to get pushed away from our mainland, and it's going
17 to be harder for us to catch our animals because we are
18 going to have to go farther and farther offshore because
19 of too much ship activity out there on the ocean along
20 with --

21 Like I know like the oil spill, like Delbert was
22 saying, is we don't know how -- federal government
23 scientists already tell us there was no way of cleaning up
24 an oil spill in the icy conditions out here. I know of
25 three oil rigs that were toppled during Hurricane Katrina,

1 and the federal government or the oil companies can't even
2 fix those, can't even retrieve them, those little oil rigs
3 out there. And if we leave junk behind, we are going to
4 just pollute the ocean. If we have an oil spill, we're
5 going to pollute our ocean. Once we pollute our ocean, we
6 are going to lose our way of life.

7 Point Lay is a traditional village. We live a
8 traditional life around here. There is not much jobs from
9 the government or from our North Slope Borough. Our
10 workforce around here is about 25 percent. Twenty-five
11 percent of this village works, and the rest of us are on
12 welfare. When we are on welfare, we live off the ocean
13 and off the land. All the animals, the caribou, the musk
14 ox, the whales, the walruses, the cogruks, the spotted
15 seals, so --

16 And I also know that because Point Lay and
17 Kivalina and Point Hope are not in the NPRA, if there is
18 an oil spill, these three villages will have no royalties
19 when there is an oil spill. I have been told we are going
20 to be the laborers. We are going to be the cleanup crew,
21 and they are just going to get us for the jobs. And here
22 we are going to lose out on it worse because we are not
23 even included in the NPRA. We are outside of the NPRA
24 boundaries.

25 And so myself and with others, I oppose offshore

1 drilling and I -- I wish the federal government would
2 listen to our stipulations and what we are trying to tell
3 them. And we would like to control -- have control of our
4 Inupiat way of life for our animals. We want to control
5 our own animals. We don't want the government telling
6 us our drill ship is going to be here and good luck on
7 hunting your animals.

8 We want to have stipulations saying during this
9 whale time period, during our bowhead whale time period
10 for that village, please stop your activity. You are on
11 our area and goes along down the coast, up and down the
12 coast and so forth, along with the belugas, along with --
13 we also -- because we know there is going to be
14 helicopters flying up and back workers and everything.
15 And helicopters is a big concern. It's a real noise
16 factor, and we feel it around here in Point Lay.

17 We are the -- we are the ambassadors of our land
18 up here. We want to keep on being the ambassadors of our
19 way of life. Thank you.

20 DR. JIM KENDALL: I want to make sure we
21 get this end of the room here, but Emma, do you want say
22 something?

23 MS. EMMA POKON: (Shakes head.)

24 MR. NATHAN HENRY: Good evening. Nathan
25 Henry, for the record. Let's see. If -- what was that

1 oil spill in Louisiana or somewhere like that? Deepwater
2 Horizon. I'm pretty sure if somebody had said something
3 like before you guys start that oil drill up here in the
4 deep ocean, if you guys ever do make an oil spill, will
5 you guys have homes prepared for those that want to leave
6 the area? And if you guys do have a drill out there, if
7 there is an oil spill, are you prepared to, like, move
8 some people if they want to move because, you know, like
9 it's being said our way of life is in the ocean and the
10 land. And are you prepared to -- not only for the oil
11 spill but, you know, some people might say, oh, man, I
12 don't know if I want to stay here. Are you guys going to
13 have homes ready, like Anchorage, inland somewhere?
14 Because I'm pretty sure that Exxon would have, like,
15 thousands of homes to get prepared for the oil spill if,
16 you know, somebody like me said something like, hey, you
17 got homes prepared for us if you do have an oil spill?
18 And does it matter what we say? Are you guys still going
19 to go out there and drill or what?

20 DR. JIM KENDALL: Those are good
21 questions.

22 MR. NATHAN HENRY: I mean, you hand me the
23 mike and I got something to say, too.

24 DR. JIM KENDALL: That's fine. If you've
25 got something to say, we want to hear it.

MR. NATHAN HENRY: I said it. Thank you.

MS. SOPHIE HENRY: Sophie Henry, for the record. I'm a member of the Native Village of Point Lay or the Inupiat Community of the Arctic Slope. And if all this offshore drilling, you know, they say that zero discharge and all that. Well, it's like buying a new car. Everything you get is brand-new. It's not going to leak, but over time it leaks, you see. And that's just going to cause a problem and it's just going to be a rolling effect of more problems, of course.

And also -- oh, both the -- you know, the Prince William Sound, you know, the Exxon/Mobil [sic], you know, that problem just -- it's still a devastation in that area for them, and if -- you know, if they were to drill out here, do the people that want to drill out here, do they even know how thick the ice is, what's underneath the ice, you know, what's there, like year-round? You know all of that? You know all that? It's good stuff.

Anyways, you know, like the famous question I have been seeing all over when they first started talking about it is how on earth do you clean up an oil spill in ice; under ice, in the ice. You know, how do you clean all that up? And if -- there is just -- it's just irritating.

Anyways, also I wanted to know, like, you know,

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kind of like what Willard said when he said that the subsistence and stuff, they are our way of life. It's our tradition. It's the way we live. And it's what the Elders lived off of hundreds of years ago. We didn't have, you know, what we have now at the stores. And we -- you know, if the Elders nowadays lose all of that stuff, you know, the living Elders we have now, they are going to -- if they can't have their -- if they lose their food, their way of life what they grew up on, pretty much the oil companies are basically, you know, letting the Elders -- you know, some Elders can't live without the food, and if they don't have the food and they pass on, it's just a rolling effect of our life.

And you know, it's just something we don't -- if you asked me like ten years ago before I moved to Point Lay, I'd be, like, yeah, I'm for offshore drilling, I'm for it. Well, I moved up here nine years ago. For the first time I hunt. So I know, you know, what it is like to have the food. I know how to hunt now. I know how to provide for my family.

My kids are going to be eight and five. And like my son, he prefers Inupiat food, which is caribou, you know, beluga, whale. He prefers that over, like, your food, pizza, crab, you know, what you guys enjoy. My son prefers our food. And if he doesn't have that, well, when

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he becomes a father, how is he going to have that for his family?

It's just basically the oil companies want to rob us of our lives basically is how I feel. And you know, with them doing that and killing off what we learned to love, they have been survive off of, they are basically in a way taking away our identity to a certain extent.

And I just -- I oppose offshore drilling 100 percent, and I'd just like the people that's going to make the decisions to do this, I suggest them to actually come here, rather than living in Washington making all these decisions -- how would they like it if, like, our community tells them how to live their lives and take away what they love? They wouldn't like that just as much as we don't like them taking away our mammals.

And it's wrong. It's stupid. And they shouldn't have a say. They should obviously look at the communities. And everybody that I know and I've heard, they all say no. We can shout as loud as we want, no, no, no, and they are still trying to come around and ask questions, like we are not going to change our minds. Why do they keep pushing us, like, oh, it's job opportunities, it's this, it's that? So what? You know, we can -- we -- so what?

You know, we would rather -- we would rather our

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whales, we would rather everything else. They shouldn't have the right to make the decision to take our lives, basically. They shouldn't have the right to take away our mammals, our -- you know, it's just our way of life. It's our ancestors' traditions. It's everything. Just like we don't get to say what they can live off of or we don't -- we don't get to take away what they love. They shouldn't have the right to take ours is what I wanted to say.

Thank you.

DR. JIM KENDALL: Thank you. Okay. I'm going to get everybody. We are going to take a break, but we have to go around first. Two folks here. Okay. I want to go over here. Thank you.

MR. ROBERT LISBOURNE: Good evening. Robert Lisbourne, for the record. I am against offshore drilling, any kind, because the person who I am today is who I stand for. I am Inupiat. We are Inupiat. We -- we have been hunting. We have the traditions we had for thousands of years. We live off the land. We live off our food. It's just a blessing to be Inupiat. And I'd just like to continue to -- our tradition and, you know, for it to go on for another hundred to thousand years.

I would just hate to see my kids and my grandkids not able to be going out there because our ocean and our land is -- we live off the food, and it's just --

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1 it's just a continuous food chain that we need. So
2 anything happen out there or in there, that chain is just
3 going to break, and we will be lost without it. It's who
4 we are and what we love to do.

5 And thanks for coming to Point Lay. I'm just
6 against the offshore drilling.

7 MR. SCOTT GUYER: My name is Scott Guyer,
8 G-U-Y-E-R. I work for the North Slope Science Initiative.
9 I was in town today for another meeting and was invited to
10 come tonight, and I'm happy to be here. Glad to listen to
11 all the comments and understand what the community feels
12 about this subject. And I work for the director, and I
13 will be taking information back to him and discussing what
14 was said here to him. So don't really have any comment
15 myself.

16 DR. JIM KENDALL: And then I think -- and
17 sir? I don't want to forget you.

18 MR. WARREN LAMPE, Sr.: Hello. Good
19 evening. Warren Lampe, Senior, lifelong year-round
20 subsistence hunter, subsistence user. Like everybody
21 said, talking about all the children that are going to be
22 growing up before -- you know, after us, we want them to
23 use, you know, our land and our sea just like I did when I
24 was a child when my parents were out there hunting and
25 providing for us. I have been in this lifestyle all my

1 life, and I don't think it will ever change. I want it
2 not to change. Just like everybody else who talk on the
3 mike tonight, I'm in full opposition of offshore oil, oil.
4 So -- and I'd like to give thanks and welcome to our
5 visitors here. They have a good voice. Their voice is
6 heard. It gives us ideas, gives us information.
7 I do serve on the North Slope Borough Fish &
8 Game Committee, volunteer at search and rescue. And with
9 Point Lay being so close to this offshore drilling, I
10 think we are the closest community, so we are in
11 opposition. We are very worried about an oil spill. It
12 is inevitable. I mean, it's going to happen, you know,
13 here now or, you know, there later. I mean, it will
14 happen.

15 I understand that they don't have the proper
16 equipment to do an oil spill cleanup here in our ocean. I
17 know just recently they had started their -- they had
18 started these science projects out here in our ocean and
19 in our land. I mean, that was just started recently. And
20 it's good to hear that, you know, we have all these
21 corporations going around trying to get information from
22 the people who lived here for 1,000 years or more, more
23 than that. And we have -- you know, we have all this
24 information in our head.

25 And I'm glad to see that there is people coming

1 getting comments from us, getting the information from us
2 that it's not written down. Nothing is -- none of this is
3 written down on paper. And it's -- it's hard. It's hard
4 for me to think of it, to have to deal with the oil spill
5 because that will change everybody's life here. We
6 wouldn't like -- we wouldn't like to see offshore oil
7 drilling. We would like to see onshore drilling as much
8 as possible.

9 I think everywhere you go they will have
10 opposition for the offshore drilling. And I'd like to see
11 more voices. I'd like to see more -- more people talking,
12 more people telling us what they know and what some of us
13 don't know. So the more information we are getting into
14 the meetings, I think the better off, but in some ways I
15 think that no matter how hard we try to stop these oil
16 developments, we are just not going to stop them.

17 We need to find -- I mean, they need to come up
18 with some kind of oil spill response that will work,
19 actually work to stop -- stop this oil if they do have a
20 spill, stop it from coming ashore, try to contain it in
21 the little area that's already affected. I think that's
22 one of the biggest worries that I have is oil spill
23 containment and cleanup because it's inevitable. It will
24 happen in small amounts or in large amounts. It doesn't
25 matter.

1 That's -- that's contaminating our food out
2 there. It's like our garden. It's like you using
3 pesticides in a greenhouse of, you know, stuff we are
4 trying to eat. It's the same thing. It's killing off a
5 lot of things.

6 But I am in full opposition of offshore
7 drilling. I have been living off the land my whole life.

8 I can't really think of anything else to say,
9 but welcome. Thank you for coming, getting information,
10 and I really hope -- I really hope it's heard. I hope our
11 voice is heard, and not only heard but put into the
12 thought and make them think about -- think about these
13 things that they are trying to get information on, not
14 just go back and just say, yeah, we did get information.

15 You know, we -- I'd like to see some like -- I'd
16 like to have them notify us, you know, talk to us back,
17 not just us talking to them and telling them, you know,
18 what we think. I think they should -- I think they should
19 -- I think we should hear their voice back after they get
20 all this information. And after we give the information,
21 I think we could get some information back on what is
22 going to happen and what did happen to, you know, all this
23 stuff that we talked about. That would be a lot -- that
24 would be a real positive thing.

25 As I said, I'm in full opposition. I like -- I

1 love my subsistence way of life. And it's never going to
2 stop for me. I'm just hoping and I'm praying that it's
3 not going to stop for our future generations that are
4 going to come.

5 I know there has been a lot of fighting for the
6 way of life that we live. You know, the oil drills up on
7 the North Slope, they are -- they are -- you know, they
8 try to take away our bowhead living. They are trying
9 to -- they are trying to get counts or, you know, like
10 populations of all of our animals, and they are trying to
11 take actions before they -- before they come up with any
12 kind of results. You know, it's nice for people to come
13 up here and get the information from the people who
14 actually live up here and see it every day of our lives.
15 Even if it's the smallest animal that we see running
16 across the road, that's part -- part of our life up here.
17 I can't put it any other way.

18 But I really do oppose offshore oil drilling.
19 I'm in full opposition to that. And everybody who talked
20 on the mike, they are in full opposition, but the way I
21 see it, I think it's going to happen anyways. They are
22 going to go out there and drill offshore. It's going to
23 happen anyways, even without our opposition.

24 It will help a lot for each and every entity
25 that comes up here we can give information to and try to

1 get, you know, oil spill response teams in these
2 communities that we live in. We reside here year-round,
3 and we are not going to move.

4 I think me and everybody else here would like to
5 have some good part of our population trained or at least
6 know how and know what to do in the event of an oil spill.
7 I think we need -- we need these coastal communities to be
8 trained and know what to do in case of an oil spill. I
9 know there is -- there is corporations that give a limited
10 amount of people, two or three or four people, who go down
11 and they will leave town for training, this oil spill
12 training and whatnot, but two or three people won't -- I
13 mean, it will help, but it won't cut it.

14 We need a community to know what's going on with
15 the oil spill and know what to do. I think it takes a
16 whole community to understand that. And I'm sure
17 everybody in this community, if they are trained and if
18 they know how, they will give a hand. They will lend
19 their hand out there to help clean up or try to contain,
20 try to protect our way of life.

21 That's another big thing with all this oil
22 development. I think every coastal community should have
23 at least a crew of people who know how to operate
24 machinery to contain and clean up an oil spill, not
25 just -- if they do have an oil spill, they will say, yeah,

1 well, we are going to have this contained and everything,
2 but they are going to be providing -- they are going to
3 say, yeah, we are bringing money up there. We are going
4 to clean it up, giving you money, putting people to work,
5 but that's the people that they already have trained to do
6 that kind of job. And I think -- I think they should come
7 to every community and at least train as many people as
8 they could and get that thought in their mind so we know
9 how to do it so we are able to do it.

10 I think that's another big thing on this
11 offshore drilling. When an oil spill does happen, you
12 know, I think every community should know what to do, not
13 turning -- not turning to the phone and trying to call
14 people and ask, okay, what do we do? We don't know --
15 that would be a worst-case scenario on a -- you know, in a
16 community level to have nobody know what to do here. I
17 think that should be another strong -- another real good
18 idea.

19 I think I've said pretty much everything I could
20 think of. I'm sure there is more but, you know, I'm -- I
21 said -- I said I think -- I think I said what counts, so
22 welcome and thank you. Thank you for your time. Thank
23 you for letting us speak.

24 And you know, we are providing information. So
25 I think -- I think it should be passed on, passed on to

1 the top, passed on to, you know, higher-ups. And we would
2 like feedback on it. We would like feedback. We would
3 like for them to, you know, at least come talk to us and
4 tell us, okay, this is what we do for your comment that
5 you said, you know.

6 We need some kind of feedback for that. We
7 didn't get any feedback for any kind of information that
8 we did get. But feedback to us would be -- would be
9 helpful. That would be -- that would move us to the next
10 level of understanding, to the next level of comments and
11 everything that -- everything that we talked about so we
12 don't keep talking about the same thing over and over.

13 We would like to see something done about it and
14 something -- they could tell us, you know, when it's done
15 so they could move on to another concern. But I think
16 that's all I got to say.

17 And I hope everybody came to an understanding
18 about all that. So thank you and good evening.

19 DR. JIM KENDALL: Thank you very much.
20 Well said, and you will have a chance to speak again. We
21 have been at this for a while. I know we have got to give
22 our recorder about a ten-minute break. So how about we
23 take a ten-minute break. We will all come back and go
24 around the room again. We won't leave until everybody is
25 satisfied.

(A break was taken.)

DR. JIM KENDALL: We notice it was pointed out by one of the community members that some people arrived after the initial presentation, and so just again so we are all on the same plate, I've asked Sharon to come up and very quickly rehash what she went through before so that everybody understands why we're here.

MS. SHARON WARREN: I was just going to, rather than go -- unless you all want me to go through the flip chart again, I can just kind of summarize what we talked about. So what's the preference?

MR. WILLARD NEAKOK: Summarize.

MS. SHARON WARREN: Okay. Why we are here today, we are here because our agency, the Bureau of Ocean Energy Management, Regulation and Enforcement, is seeking your comments on the Revised Draft Supplemental Environmental Impact Statement. Copies are on the table. We are here because of a court litigation that was done back in 2008 prior to sale 193. And the Court told us to go back and to readdress the concerns.

So those are the three concerns we are addressing in that document is what the Court told us we had to do because our EIS was not adequate on natural gas development or on the missing information that we stated in the document. So we have to follow the regulations and

go back and do it.

In addition, after we published the draft supplemental EIS, we came up here, got the community's comments, got public comments, over 150,000 comments. We -- a lot of those, it was on the heels of the Deepwater Horizon event, and communities wanted us to say what would happen if there was a very large oil spill. So we went back and did an analysis on a very large oil spill. And so that is in the document. So not only do we have the information that we had in the last draft SEIS, we also had information on what it would be if a very large oil spill would happen.

We need your comments. We need your comments. We need any traditional knowledge to take a look at our document. The due date for public comments and your comments are due July 11th. We are using regulations.gov. There is information on the table on the website to how to submit your comments. If you have got any questions on how to submit those comments, we have a telephone number to our office in Anchorage. We are out of Anchorage, Alaska. We are all Alaskans up here. So you can call us and we can let you know.

Again, after we take your comments, we will prepare a final supplemental environmental impact statement. This supplements the environmental impact

statement that was done in 2007. And it will go to the Secretary of the Interior who will make the decision whether to affirm the lease sale, the area that was offered for lease in 2008, or make some changes to it. He can affirm the lease sale, keep the leases, or he can cancel the leases. It's all on the table. So he needs to go back and make that decision.

Once he makes that decision, it will be filed with the Court. The Court has asked him to make that decision by the 3rd of October. He will make the decision. It will be filed with the Court, and the district judge in Alaska will decide whether or not our agency has complied with the federal laws of the National Environmental Policy Act and any other federal laws that were raised in the litigation to make sure the agency met its obligation in doing that.

So that's a quick oversight [sic] of it again.

DR. JIM KENDALL: Thank you, Sharon. One thing I want to add. And I heard this in this meeting and at our meeting government-to-government this afternoon and at another meeting. Some of the Elders have said you have been coming up here for 15, 20, 30 years. We tell you the same thing. Well, it's not that we are coming to bother you, thinking you might change your mind, but there is a law, the OCS Lands Act, that requires a five-year program

and requires the Secretary of the Interior to do this.

While you have this requirement, you also have new administrations and new presidents and new Secretary of the Interior and all those kind of folks. But because of the OCS Lands Act and NEPA and others, there is a requirement that we come back and speak with you. So in many ways you ought to kind of feel good about that, that people have to come up and speak with you and make sure that's what it is and somebody just doesn't say, oh, that was 30 years ago, it doesn't count. We can't do that. We have to make sure we are talking with the communities and your voice is heard.

And so it's kind of a bother. This is the best time of the year for you. It's gorgeous outside. I understand belugas are coming. The fishing is going to be great. And here we are at a meeting. But this is important and this is what we need. So thank you very much.

So why don't we start on this side of the room. Okay. Sir, would you like to comment again?

MR. NATHAN HENRY: First of all, Nathan Henry. And I'd like to apologize. I was thinking that maybe you guys were the ones that were coming in to the ocean and drilling. So I'm sorry about that.

DR. JIM KENDALL: That's fine.

1 MR. NATHAN HENRY: So just a scientific
2 question. Is the global warming a natural cause or is the
3 global warming caused of the oil being sucked out -- like
4 opposite from insulation. You think that maybe that oil
5 down there will keep it cool and it's just being sucked up
6 and now it's just nothing to keep it cool, maybe, that
7 might be cause of -- part of the cause of the global
8 warming?

9 DR. JIM KENDALL: That's a good question,
10 and we can talk about that all night. This is Jim Kendall
11 speaking. Bottom line is, no matter what's causing global
12 climate change, it's happening, and it's being felt first
13 in the Arctic you are on the forefront of it, and we have
14 to consider that in our analyses. But the jury is out on
15 what's causing it and why it's happening, but it is
16 happening.

17 You are -- right here in the Arctic it's
18 starting first. And we have got to deal with it in our
19 analysis, as well.

20 MR. NATHAN HENRY: There has been --
21 throughout the years and years there has been like
22 billions of gallons of oil being sucked out of the ground,
23 and if maybe the scientists go back to that same place
24 like 30 years ago where they did look at it 30 years ago
25 or 40 years ago and then look at it at the time the oil

1 was sucked out and then, you know, see if there was a big
2 major difference or there are still grounds -- there are
3 still, you know, the natural flowers that were supposed to
4 go there or are there different flowers growing out or,
5 you know -- I know that you can't stop the global warming,
6 but you can stop the oil drilling possibly.

7 DR. JIM KENDALL: It's in the record.
8 Thank you.

9 MR. NATHAN HENRY: Okay. Thank you. Good
10 evening.

11 DR. JIM KENDALL: Thank you. It's Nathan,
12 right? Thank you. Okay. Next?

13 MR. WARREN LAMPE, SR.: Hello. Warren
14 Lampe, Senior, for the record again. There was a couple
15 thoughts that did come to mind within the short time that
16 I had the mike. This ocean and where they are drilling,
17 where they propose to drill is right smack in the middle
18 of our highway. It's like a highway, our food highway
19 that our animals have to migrate past us and get back.
20 They get to their feeding grounds. They get to their
21 grounds that they have babies. You know, they pass by us,
22 and they have to pass by us to do it.

23 With the oil spill happening out there, it's
24 going to halt the migration. It will reroute the
25 migration. It's just like when we are traveling to the

1 store on the highway, a tree or something accidentally
2 falls on the highway, it's going to stop us. It will stop
3 us from going to the store. Same thing it will do to the
4 animals with the oil spill. It will halt the migration,
5 change the route. And it might take years. It might take
6 20, 50, 100 years for us to realize where this migration
7 is going and, within that time, it will be too late.

8 And on what Nate was saying, too, with the oil
9 being sucked out of the ground and its relevance with our
10 global heating, global warming, I mean, there is relevance
11 that they are pulling the oil out of the ground and they
12 are burning it. It makes carbon monoxide, carbon dioxide.
13 So in a sense, Nate is -- part of his -- what he said, I
14 mean, he's right.

15 But with our ocean and the drilling, I think --
16 I think most of their studies and I think most of their
17 money that they are putting out for this energy, I think
18 it should be going towards renewable energy like ocean
19 currents. They produce energy. They have proven
20 technology that we can get energy out of currents. We
21 have technology that we can get energy out of the wind.

22 We have a whole bunch of technology that's
23 proven to convert to -- converted to this renewable energy
24 that we could use over and over, not like the oil and gas
25 that we burn one time or -- you know, we could use the

1 heat off of it after we run a piece of machinery. We
2 could use the heat off of it. But it's not the same.

3 I think most of this money that they are pouring
4 out into getting energy, I think most of it should be put
5 to renewable energy. I think that's another big --
6 another big situation that, you know, they should think
7 about and put to use, renewable energy. With that, we
8 could have renewable -- we could have, like, wind turbines
9 here to have energy whenever we have wind instead of using
10 oil all the time to heat our homes.

11 And that's another part of the -- another part
12 of the situation that I'm trying to understand and I'm
13 trying -- I'm still trying to calculate it in my brain
14 that -- all these negative effects that are going to
15 happen to us. And once that happens, there is pretty much
16 no way of getting it back. There is no way of making our
17 life the same. It's going to be changed, you know,
18 probably forever.

19 But I think a lot more money should be put into
20 renewable energy instead of having all this wasted money
21 of trying to get, you know, oil out of our ocean and --
22 because a lot of the money that they put in, it's -- it's
23 almost like a waste to me. They put all this money in and
24 then their plan doesn't go through as they are trying to
25 plan. Somebody else stops and steps in and say, no, that

1 can't be done. You can't do it that way. So all that
2 money that they use to try to come up with all this
3 information, it could have been used to, you know, put --
4 put it towards renewable energy. I think that's a big --
5 that's a -- that's a real big situation that should be
6 thought of more carefully, put more information into
7 there.

8 I think they should have a round of
9 informational meetings about renewable energy because I
10 think that's some -- something that -- that we would all
11 support instead of right now we are all in opposition of
12 offshore oil drilling, and if you come up with renewable
13 energy such as, you know, ocean current providing energy
14 or the wind providing energy for us, that would be a whole
15 change of story that would save our traditional cultural
16 way of life. It would save a whole culture, a whole group
17 of people who live up here off the land and off the sea.

18 I think most of us would -- we would be in
19 support of renewable energy because we are all -- we are
20 all opposed to offshore oil drilling and oil energy, even
21 on our land where we are opposed to oil energy, oil
22 drilling so much, but it's more so far offshore. We don't
23 want it to happen. I think they should put more --
24 more -- more of what they have, their funds, their
25 thoughts, their energy, put more of it into renewable

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1 energy. I think that's -- I think that would be a -- that
2 would make a whole lot more of Alaska happy.

3 I think that's -- that's a -- that's a big
4 thought, too. I think that's -- that's what should
5 happen. That's what should be happening because oil is
6 going to run out, you know, 20, 30 years from now just
7 like our Prudhoe Bay is running out. We are going to run
8 out of oil. We are going to run out of energy. Within
9 that time we may have an oil spill. We may have
10 contamination that's irreversible.

11 I mean, we go to renewable energy, we are -- we
12 will be able to make use of it over and over again instead
13 of this oil where we just use once and, you know, it burns
14 off into our atmosphere. It causes a chain reaction of
15 negative events.

16 And when I think in my mind, I think we could
17 use this -- we could be going to renewable energy, and
18 it's not going to be -- it's not going to be as polluting
19 as burning oil and refining oil, all of this negative
20 impacts of just getting this oil out of the ground and
21 getting it ready for us to use and making it useful for us
22 to burn safely.

23 I think -- I think they should turn their head
24 the other way, turn it away from offshore oil drilling and
25 put -- you know, face the renewable energy because the oil

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1 is going to run out. Our wind won't run out. Our water
2 currents, they may change, but they are still going to be
3 there, not like the oil. You know, it's going to
4 disappear. It's going to be gone. So that's a big
5 thought.

6 I think more -- more thought, more energy, more,
7 you know, information should be put towards renewable
8 energy. That's something we would be in support of
9 because everybody -- I'm -- I think everybody that you --
10 everywhere you go there is going to be opposition. There
11 is going to be strong opposition for offshore oil
12 drilling.

13 So if that could make it to, you know, the
14 decisionmakers up there to -- I think they should change
15 direction and start -- start developing renewable energy.
16 That's a big thing because I think a lot of us would be in
17 support of that. So that's a thought I had in mind.

18 So thank you very much.

19 MR. LEO FERREIRA, III: Good evening. Leo
20 Ferreira, III, for the record. I just wanted to get out
21 some stuff that I kind of left out. I can't remember
22 everything, but I just wanted to touch a little bit on
23 science and the studies that's been going on. I don't
24 think the lease sale of 193 should not [sic] happen
25 because there hasn't been a real good baseline study of

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1 our sea animals, of our fish, of our bearded seals, our
2 seals, and our bowhead whales. There hasn't been a real
3 good study on our sea animals and how the effects of an
4 oil spill -- what the harms would be to them. And so we
5 need to do more baseline studies before the sale lease of
6 193. There needs to be more base study of our animals in
7 the sea.

8 And another thing that the Coast Guard, the
9 Coast Guard ships, I already know that when they go out
10 here, they do a little drill hole just to go see how much
11 oil is in there, that there will only be -- I understand
12 there will only be one ship for containment of an oil
13 spill in case.

14 And Warren has a point about an oil spill that
15 the communities in the North Slope, the residents of the
16 outlying villages, should all be trained for an oil spill
17 so the outlying communities will be able to respond faster
18 and will have more people available. And that's just
19 another way of generating jobs up here on the North Slope
20 is we all live off of the land and sea year-round, whether
21 it be berries, tutu, caribou, musk ox, polar bears, brown
22 bears, walrus, bowhead whales, beluga, all the sea animals
23 and land animals. That would help protect our way of
24 life. So if oil does get big, that we are ready for an
25 oil spill, we would like to have training.

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1 And that's another reason why the sale of 193
2 shouldn't happen because their response is going to be too
3 slow, especially when you have a Coast Guard ship
4 stationed almost 1,000 miles from where we are at right
5 now.

6 And since there is no scientific way of cleaning
7 up an oil spill in the ice conditions, in the sea ice
8 conditions and the harsh environment out here in the
9 Arctic Circle, if there is an oil spill that's going to
10 affect all of our sea animals, our fish, our whales, our
11 beluga, our walrus, even our sea birds that migrate out
12 here when springtime has arrived, and also fall time is
13 what we deal with an oil spill, and that will hurt our way
14 of life as we know it to this day.

15 And I feel that government is not capable of
16 replacing our way of life for the great dollar. Right now
17 that green dollar doesn't even help us out in this
18 village. We live off of welfare around here, and the
19 biggest job is the North Slope Borough, and that's about
20 20 percent of this village workforce. And the rest of us
21 are on welfare.

22 I don't think sale 193 should happen until some
23 of these other issues are dealt with and more studies
24 being done just in case there is an oil spill and we have
25 to clean it up. We feel like we shouldn't have to pay the

1 price for an oil spill and then end up living off of
2 welfare because the oil spill has taken away our way of
3 life out here in the ocean because we already know oil
4 kills off and kills off on land. It's going to kill off
5 worse in the water. And it's not just going to affect the
6 state of Alaska Natives. It's going to affect everybody
7 up here in the Arctic Circle. It's going to chart a chain
8 reaction.

9 Just like with global warming, it's already
10 starting a chain reaction. It's just the State ain't
11 going to tell us yet, but we already know because we have
12 a change in environment up here because of global warming.
13 So I hope that the federal government listens to our
14 comments and takes into consideration that what we have to
15 say will help make these rules and regulations for the
16 offshore oil and gas drilling for the federal government
17 with the oil industry.

18 Our ecosystem out here is very sensitive to
19 pollutions, to pollution of the oil, to pollution of noise
20 activity. We already know; knowledge already tells us and
21 our ancestors already told us, and we even see it
22 ourselves and we live the life. We would be disturbing
23 our animals and changing our migration routes. Warren has
24 a point there when he talks about the oil having an affect
25 on our animals. He's right. It will change the

1 migration, or we might not even be able to harvest our
2 animals because of an oil spill.

3 And the oil industry has no way of cleaning up
4 an oil spill. And we would very much like to see them
5 have some kind of way of assuring us that in case there is
6 an oil spill, there would be a fast response to an oil
7 spill. And we don't want to lose our way of life because
8 we know if there is an oil spill, it is going to take away
9 our way of life. We already know. But we know we have to
10 try to balance things out and work with the federal
11 government and work with the Obama Administration so we
12 can have these buffer zones and these stipulations put
13 into effect so we could try to help our way of life and
14 sustain it the way we all come to an understanding.

15 So I oppose sale 193. And thank you.

16 MR. EARL KINGIK: Boy, I'd like to thank
17 Point Lay. You guys say the same thing Point Hope says.
18 You guys say the same thing that Kotzebue said. And you
19 guys say same thing -- I have been listening to this for
20 20 years. Every time BOEMRE comes to our communities to
21 talk about offshore leases, Point Hope always say no.
22 It's been -- my father was against offshore activity, and
23 I'm strongly against offshore activity.

24 I had a chance to go down to the Gulf when it
25 happened, and I witnessed the government, the oil

1 companies not really doing anything to try to stop that
2 spill at the Gulf. I seen some birds that I haven't seen
3 in a long time, and I seen some birds I will never see
4 again, like what has happened with the Exxon Valdez oil
5 spill.

6 One good comment I heard tonight was Mr. Lampe.
7 He wanted feedback. He wanted BOEMRE to come back and
8 explain about the comments that Salazar will be looking
9 at. So you see, Mr. Kendall, I think the Village of Point
10 Lay would like you to come back and explain about your
11 comment -- about their comments and how you are going to
12 submit it to Salazar.

13 Before October's decision, I'd like to take all
14 the tribal council members to Washington, D.C. when he's
15 going to make his decision. And my goal is to pick up a
16 resolution from all the tribal villages about opposition
17 to offshore activity.

18 We all know in the past North Slope Borough has
19 been doing a lot of research in which our communities has
20 to have anything to say about. Even though we have got a
21 North Slope Borough Wildlife Commission, our communities
22 always ask for assistance and very little is sent forth.
23 So we in the communities don't really trust the North
24 Slope Borough or the State of Alaska. We trust ourselves
25 because our traditional knowledge is very strong, and we

1 carry on for years. We don't write in the book. Our
2 ancestors, our parents, our grandfathers give it to us by
3 words.

4 I thank you very much from the bottom of my
5 heart about your comments. It's very strong, make me feel
6 real good that you guys are against offshore activity.
7 I'm going to do a radio talk show at KBRW like I did at
8 KOTZ, making my report what kind of meeting you had at
9 Point Lay, what kind of meeting we had at Point Hope and
10 what kind of meeting we had at Kotzebue. Hopefully I'll
11 be able to make it to Wainwright.

12 I haven't heard anything much about baseline
13 studies about our wildlife, but all I heard was oil spill.
14 Everywhere I go to, we talk about oil spill. So you see,
15 I'll send a message to Salazar, Mr. Salazar, people of the
16 Arctic, the coastal communities, the people that are part
17 of the ecosystem in the Arctic, want to protect the
18 wildlife that they -- that the wildlife is feeding the
19 people for thousands of years, the wildlife that keeps our
20 cultural people together, the wildlife that keeps our
21 people united, wildlife that would make our people work to
22 good and be stronger.

23 So you see, Mr. Salazar, we are in heavy
24 protection. We need heavy protection from oil development
25 in the Arctic; not only oil development, but the

1 transportation routes coming from Europe going to Asia
2 from the Northwest Passage.

3 So thank you, Mr. Salazar, for accepting my
4 request. Thank you.

5 MS. JOANNE NEAKOK: I'll share this.
6 JoAnne Neakok, for the record. I just want to share that
7 I'd like to support my grandchildren and my children and
8 my future grandchildren that, you know, whatever is
9 decided for whatever they can use for energy, you know, I
10 really -- I really oppose offshore drilling myself.

11 But you know, there is jobs that we depend on.
12 And we are so spoiled, like someone mentioned here,
13 because we can just turn on a light switch and we don't
14 have to hang dry our clothes. And we don't have to, you
15 know, walking for transportation, but I -- I really feel
16 that, you know, whatever the decisions are, you know, we
17 are being attacked either way.

18 And I love going out to the ocean with my
19 husband. We share a lot of good times out there. Brings
20 us joy to our family when we bring home something from the
21 ocean. And when the captains bring home a whale, it's a
22 happy occasion for the community. It brings the community
23 together stronger, and we are able to work with each other
24 hand in hand. And it's a blessing, the ocean. It brings
25 life to everyone, you know.

1 For me it was scary to even ride out there on an
2 18-footer but, you know, when the waves are rolling or
3 the -- you know, the waves are so rough, you know, I think
4 about how mighty God is out there, controlling the waves.
5 And you know, I say a prayer for anyone that goes out to
6 hunt, that God will just bring them home safely. I'm sure
7 everyone does that in the community, not only myself and
8 Willard or, you know, other families.

9 And Marie mentioned that, you know, we worry
10 about hunters out in the wintertime. We are having to go
11 search distance, and it takes fuel to go out and look for
12 the person. And that's, you know, gas, using gas.

13 But I wanted to say that sharing our food from
14 the ocean is always a blessing to bring people together,
15 and that's a strong, you know -- I think it's strong
16 enough to say that it pulls the families together. But I
17 want to share from Genesis I, Verse 10. "And God called
18 the dry and earth and the gathering together of the
19 waters, all he sees, and God saw that it was good." And
20 I -- I see it that way. You know, it's a blessing.

21 Thank you.

22 MR. WILLARD NEAKOK: My name is Willard
23 Neakok, for the record. I have three more items that are
24 related to offshore drilling which I'm in opposition. But
25 first, you know, a few people would look out the window.

1 Look at the sky. Fifty years ago, for those that remember
2 those days when we had our picture taken outside, the sky
3 wasn't that light. What is it? Maybe powder blue.

4 Fifty years ago, 40 years ago, 30 years ago,
5 maybe, you know, our skies were a lot bluer than that. If
6 you look at the childhood pictures where your parents are
7 taking pictures, oh, yeah, you know, cute. I want to take
8 this picture. And if you look in the background, look at
9 the sky. You know, for us, 50 years plus, look at our
10 childhood pictures. Look at the sky. You will see the
11 difference. They were a lot bluer than that, all because
12 of emissions from fossil fuels, smokestacks that weren't
13 regulated, car engines that weren't tuned up. And I'm
14 sure that's -- you know, the kids nowadays, they look
15 outside and, oh, it's a nice beautiful day. Fifty years
16 ago, 40 years ago, 30 years ago, the sky was a lot more
17 bluer than what we see today.

18 Just think about it. Even pictures back in the
19 days, you look at them, you will see the sky a lot more
20 bluer, more colorful, you know. We are seeing a blue
21 planet from a satellite, we see it blue, big blue planet;
22 but then a lot of people don't think of looking up and
23 seeing blue sky no more. I noticed that like maybe 20
24 years ago. Our skies are changing.

25 Why is that? And nowadays, learning from

1 emissions from fossil fuels unregulated, you know,
2 emissions from all the different countries that we have.

3 But three other things that I wanted to mention
4 is the sound that your drill rig will make. I'm going to
5 use Kivalina as a subject. Thirty years ago, you know,
6 they had -- they discovered Red Dog with all the zinc.
7 Before then, you know, they had belugas, they had whales
8 migrating through their ocean.

9 And then they built that Red Dog port, and all
10 the noise coming from that port was affecting the
11 migration of all their whales, their belugas, their fish.
12 Now they have to go 30 miles north just to try and harvest
13 belugas, bowheads. They never had that problem before
14 sound start being emitted from the ships that are going in
15 to Red Dog port.

16 And if we have that up here, you know, right
17 where lease 193 is going to be, who knows what our
18 migration route is going to be for the bowheads or
19 belugas.

20 You know, sound travels quite a ways on the
21 water, a lot more further than on land. Another thing
22 that's why I'm in opposition of offshore drilling.

23 Another thing is where sale 193 is, I had to ask
24 Robert what that shoal was, Robert Suydam. I had to ask
25 him what that shoal was and he said Hannah Shoal. And

1 right there on the north side of where they want to drill,
2 the south side of it is where the current goes. And on
3 the south side, that's where the walrus go there and feed.
4 They got clams, they got mussels; you know, whatever they
5 need. It's a small area, but that's where the walrus goes
6 to feed.

7 I learned that. You know, I am a walrus
8 commissioner. And I just learned that just in February
9 when we had a meeting with Shell Oil. In fact, Shell Oil
10 and we had an Eskimo Walrus Commission meeting almost a
11 day apart from each other. I learned where they wanted to
12 drill. Next day I learned that is where the largest
13 concentration of clams and mussels and where the walrus
14 feed.

15 And if we have an oil spill, the current is
16 going to take all that oil and spread it along that Hannah
17 Shoal. And where the -- you know, if the walrus eats
18 that, then, you know, they are doomed. Where are you
19 going to go next? That's another thing. That's why I'm
20 in opposition of, you know, having sale 193 right there.
21 It might be the hottest spot for oil, but it's also the
22 hottest -- more important that the walrus has been using
23 for probably thousands of years to go there and go eat.
24 Now they have to swim 60 plus miles just to come to land
25 and rest and then go back out to Hannah Shoal again to go

1 feed.

2 Losing one thing just because we want to gain
3 another, you know, gas, diesel, whatever, to, you know,
4 have lights, have gas to run around by boat, snowmachine,
5 aircraft, you know, that's, you know -- that's why we are
6 in opposition. We are trying to balance everything.
7 That's why, you know, we say what I've heard here tonight,
8 you know. Let's deplete whatever is on land. There is
9 ANWR. There is all different other places here in the --
10 or the Lower 48, I should say, that there might be
11 potential for oil. Canada, even.

12 We are so dependent on trying to provide our own
13 United States to be dependent [sic] of, you know,
14 producing our own oil, our own gas, yet, you know, we
15 still order from, you know, other different countries.
16 And now we have a small version of, you know, oil
17 producing at Prudhoe Bay that only provides, probably,
18 what, 15 percent of the United States consuming oil.

19 That's another thing. I like the idea of, you
20 know, renewable energy, you know. We are in the 21st
21 century. Why can't we produce something to -- that will
22 be renewable, something that we can use to run our
23 generators, run our snowmachines, run our boats? We have
24 technology out there.

25 It's like Warren said, let's use that money to

1 try and find something that we can renew every -- even if
2 we have -- you know, we have cell phones. We have
3 cameras. We have, you know, renewable, rechargeable
4 batteries. Why can't we do something to substitute fossil
5 fuels?

6 Someday we are going to run out. That's why we
7 need the technology to recognize and figure out what we
8 can use to renew our way that we are so used to.

9 When we first came here, you know, we had to go
10 find wood, coal, you know, just to heat our homes. We had
11 to carry out our honey buckets rather than just push a
12 little handle to make our waste go to the sewage plant.
13 You know, we are accustomed to it. It was introduced to
14 us.

15 Now, you know, with the technology we have
16 today, I'm sure that, you know, scientists -- you know,
17 somebody will come up with something that we can use
18 rather than it will be there forever. Maybe someday our
19 skies will start turning darker blue than what we see now.

20 And I think the last thing I was going to talk
21 about was what are we going to do if -- if this
22 exploratory drilling happens and we have the worst-case
23 scenario of large oil spill. We don't have the capability
24 of having staging areas for booms, for vessels. Closest
25 one is, what, Kodiak. Or Prudhoe Bay. They have a small

1 one, but not enough to contain what may have happened like
2 in Prince William Sound or the Gulf of Mexico. Where are
3 we going to stage it?

4 I go out one day and start seeing big containers
5 of boom, big, you know, boats out there. We have like
6 six, seven different inlets that we utilize, each and
7 every boat captain here in the village we go in and out of
8 every summer. We utilize almost every one of them. You
9 know, where are we going to -- might take four or five
10 days before we finally reach or they finally reach with
11 adequate boom material to stop the stem of spreading.

12 Sure, Shell said that they are going to have
13 boom close enough on their different ships. They are
14 going to have boom. But what if it's bigger than the
15 Exxon/Mobile [sic] or what if it's bigger or just as big
16 as what happened in the Gulf of Mexico? They don't have
17 enough containment booms to take care of the oil spill.
18 Where are we going to stay? Take four or five days for,
19 you know, a ship to come up with enough containment.

20 I heard somebody say, what about the oil under
21 the ice if it happens during the winter or during breakup.
22 We have a lot of moving ice out there. We have a lot of
23 underwater currents that can take oil that we can't see on
24 the surface of the ice. You know, who knows where it's
25 going to go? Oil companies say, yes, we have the

1 technology on how to do it. But how are they going to do
2 it underneath the ice? Oil is lighter than water, and it
3 can travel with the current.

4 That's why I said earlier, you know, all the
5 other coastal villages on the west coast of Alaska are
6 going to see like what Louisiana and Florida are seeing,
7 tar balls being washed ashore. I heard about plankton,
8 the micro-organisms. It's going to domino effect to --
9 from micro-organisms to the bowhead. It will do that,
10 like I said again earlier, we lose everything. We lose
11 our way of life. Like what I heard from Sophie, we lose
12 our identity. We lose our identity because we take care
13 of the ocean and the ocean takes care of us. We need to
14 take care of the ocean. If we lose that, you know, we
15 lose our identity. We are going to have to live off the
16 land.

17 A lot of people -- we need different foods. We
18 get tired of hamburger, pizza. That gets monotonous.
19 Getting tired of this land-based food or McDonald's or
20 Burger King or Pizza Hut or whatever. It gets old. We
21 need something different in our diet. That's where the
22 ocean comes in. If we lose our ocean, we lose everything.

23 And I hope that Mr. Salazar will hear our voice,
24 understand what is going to happen if we have an oil
25 spill. I hope he understands that traditional knowledge

1 that has been passed on to us from generation to
2 generation by word of mouth. If he hears that, I hope,
3 you know, he does not make this a reality because we are
4 the ones that are going to lose. We are the ones that are
5 going to lose. We are going to be going to the store. We
6 are going to be going inland.

7 But yet, you know, we have currents that go up,
8 or rivers from the ocean. Can go at least maybe 15 miles
9 inland before we, you know, when I first moved here, we
10 had to go inland to get fresh water. Sometimes we had to
11 travel quite a ways up our river, dip our hand in the
12 water, still a little salty. We have to go further up.
13 You know, if we don't have containment booms, we have
14 currents that go inland from the ocean, it's going to
15 affect whatever animals that we have in land, too. That's
16 a scary thought.

17 But those -- like I said when I first started
18 speaking, for those that are 50-plus years old and you see
19 our childhood pictures, you see the sky, you will see when
20 I'm talking about. I just hope that Mr. Salazar will make
21 the right decision so we can pass the traditional
22 knowledge that has been passed on to us to our children,
23 our grandchildren, and hope they also pass their knowledge
24 that they learned from us to continue to do the things
25 that we have enjoyed here in the small village. That way

1 they can enjoy what we have enjoyed today because, you
2 know, we have lived off the ocean for thousands of years
3 and we don't -- we want to continue to live off the ocean.

4 Change of diet, change of food. Once in a while
5 we eat store-bought food, yeah, but we live off the land
6 and off the ocean, you know. That is what we use the
7 most. There is natural resources, the natural foods, that
8 has been provided by -- we don't over harvest. We
9 don't -- waste anything.

10 So you know, I hope Mr. Salazar hears our
11 testimonies, not only from this village, but any other
12 villages that BOEMRE is close to and hear what we are
13 talking about. I hope that Mr. Salazar makes the right
14 decision. Thank you.

15 MS. SOPHIE HENRY: This is Sophie Henry
16 again. Just to add on kind of what Willard was just
17 saying, but from my experience -- I moved up here nine
18 years ago. And nine years ago when I came up here, there
19 was, you know hundreds and hundreds of caribou right here.
20 We had to chase them off of the runway for the plane to
21 land. I mean, it was overloaded with caribou.

22 And a few years ago, BHP started drilling a coal
23 mine and they started having a helicopter, and traffic
24 went back and forth. Well, that -- you know, that changed
25 the migration of the caribou, so that pretty much robbed

1 our community of harvesting those caribou. Well, now,
2 Washington or Shell Oil or whoever wants to, they want to
3 drill out here in our ocean.

4 Well, if they change the migration of our
5 whales, all our mammals, you know, we might never get to
6 hunt that again. They may never come back up here. We
7 may never see them. We may never -- we might not ever get
8 to eat any of that food again. So they are pretty much
9 put in like a teetertotter. Yeah, it's a good thing for
10 them to -- you know, for Alaska, I guess you should say,
11 to drill for the money, but they rob us of our food and
12 our way of life and our tradition, you know.

13 And it's just -- it's a teetertotter, and they
14 are putting a hard decision to make, and we just hope and
15 pray that they listen to the communities and, you know,
16 give us the opportunity to live our traditional ways and
17 the way our ancestors lived. And hopefully, you know, we
18 see the other side where we can, you know, continue to
19 live this way and not get robbed of our mammals. You
20 know, we don't get robbed of our food and our tradition
21 and our way of life. It would just be nice for once our
22 voices get heard loud and clear and they get -- they just,
23 you know, drill onshore rather than offshore, which would
24 be a lot better than offshore, I should say. But that's
25 all.

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1 MR. WILLIAM TRACEY, JR.: William Tracey,
2 Junior. Inupiat name is Aqpaqtuaq, named after my aaka,
3 grandmother Dorcus Neakok. I was born in Barrow, raised
4 here in Point Lay all my life. Went hunting. I almost
5 lived like a nomadic life when I was a kid with my
6 grandparents. We would travel up and down the coast by
7 boat. Warren Lampe could attest to this. He was there
8 for a lot of it, also.

9 We traveled by boat. We lived in a tent. And
10 what we caught was our dinner, our lunch, our breakfast;
11 bearded seal, ringed seal, spotted seal, caribou, ducks,
12 eggs, fish. And we would hunt these animals, get our
13 fill, come back here, put them in the cellar and do it all
14 over again, camping up and down the coast from Icy Cape to
15 Kutchiaq.

16 Wintertime we would continue that. We would go
17 to land into it ice fishing and caribou hunting. During
18 the summer we got a caribou inland, and it was either too
19 hot or too many mosquitoes to butcher the caribou. We
20 would load the caribou whole and go out in the ocean and
21 find a piece of ice and butcher the caribou out on the
22 ice. This would be June, July, all the way in August we
23 would have floating ice. We don't see that too much
24 anymore.

25 Now, I grew up hunting beluga and walrus, and

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1 noise pollution is a big thing when it comes to beluga.
2 Learning from our mistakes, we banned the use of ATVs on
3 the spit while we are herding the beluga because the noise
4 from the ATV will carry into the water and scare the
5 beluga out into deeper water, making it harder for us to
6 herd the beluga. And we also banned any aircraft flying
7 over the ocean or the lagoon during this time of the
8 season because the noise of the plane will scare the
9 beluga out and away. So we have our president out with
10 Era Aviation to stay away from our hunting areas for
11 beluga.

12 I hear a lot of people saying the ocean and land
13 is like our garden. I don't know how many people in the
14 U.S. have a garden anymore. More and more people are used
15 to shopping at a Carrs or a Safeway. I like to look at it
16 this way: The land is my Safeway, and the ocean is my
17 Sam's Club. I get all my bulk foods from the ocean, and I
18 get my canned goods and baked goods from the land. Just
19 another way to understand how we use our land and water.

20 People talk about the ocean getting polluted if
21 there is an oil spill, all the animals and vegetation in
22 the ocean and the ducks and the birds that live in the
23 waters surrounding the spill. We see it on TV. Every
24 time there is a spill, they are cleaning animals. I don't
25 know how it would look if you see some people dressed up

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1 in Tyvek suits trying to scrub off a polar bear or a
2 walrus, even caribou.

3 If the lagoon got contaminated with oil, our
4 whole entire Western Arctic herd uses our lagoon to get
5 away from the heat and the mosquitoes. You will see the
6 entire herd sitting in the lagoon. They will cross the
7 lagoon and walk on the spit where there is less mosquitoes
8 and more wind. They will cross the inlets in whole herds.
9 And I couldn't even imagine losing that whole herd of
10 caribou, a catastrophe like that would happen.

11 So thank you. Good evening.

12 MS. MARIE TRACEY: Hi. This is Marie
13 Tracey again. Secretary of State [sic] Salazar, if you
14 are listening -- and I'm sure you have listened to all of
15 us, and we are very concerned about our ocean and how it
16 may affect our life, our food chain. And I would like you
17 to please be our hero. We will be waiting for your
18 comment on what we have said from our little Native
19 Village of Point Lay run by a tribal government. And I'm
20 so happy to be talking to you. I sure wish you could talk
21 back to me right now, but be our hero.

22 Thank you for listening to us and sending these
23 people here to Point Lay. They are getting bit by
24 mosquitoes, but I'm sure they don't mind. Good evening.

25 MR. ROBERT SUYDAM: Robert Suydam. Folks

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1 have done a phenomenal job about talking about how
2 important the ocean and the land is. And so I'm not going
3 to add much to that. I don't think that's kind of the
4 role for my voice, anyway.

5 But I would like to say a couple more things
6 specifically about the EIS and the ways that I think it --
7 the agency should re-evaluate, redo the EIS between the
8 draft stage here and the final stage.

9 The first thing is lots of folks have talked
10 about the need for information and that there is more
11 information that's needed, and that's absolutely true.
12 However, it's also true that we need to use the
13 information that's at hand correctly.

14 And so, for an example, on page 106 under the
15 section of cetaceans and effects from natural gas
16 production, it says, gray whales, bowhead whales and
17 humpback whales have been shown to -- "that received
18 levels of impulses in the 160 to 170 dB range appear to
19 cause avoid avoidance behavior." And this is just not
20 true. The bowheads are actually much more sensitive to
21 sound. And the available literature says they avoid
22 received levels of industrial sound oftentimes down to 120
23 dB. So the statement here is misleading at best, and
24 please make sure that the right information is used to
25 evaluate what the potential impacts are from the

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1 activities under the EIS.

2 Mitigation measures, there is a section in here
3 that's not very thorough, and it references back to the
4 original 193 EIS. And there are some things that have
5 been said today that I would like to reemphasize that the
6 agency needs to consider as mitigation measures.

7 Zero discharge is one of them. Shell has agreed
8 to zero discharge in the Beaufort Sea, but they haven't
9 agreed to zero discharge in the Chukchi Sea. And that
10 should be a standard mitigation for both areas. Certainly
11 some discharge occurs early on in the topple, but muds and
12 cuttings and industrial waste, household waste, those
13 types of things shouldn't be discharged into the ocean
14 because it's people's gardens or Sam's Clubs, or whatever
15 it might be. So zero discharge is a best available
16 technology that Norway implements and should be
17 implemented here, as well.

18 Many times beluga hunters here in Point Lay in
19 the past have told me they don't want any industrial
20 activity to occur in the Chukchi Sea until July 15th or
21 until the beluga hunt has occurred. So that should be a
22 standard mitigation to protect the beluga hunting here in
23 Point Lay and to protect the beluga hunting or the belugas
24 themselves.

25 No ships out there in the Chukchi Sea till after

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1 the beluga hunt has happened or until after the 15th of
2 July. Folks have talked about walrus and seals hauling
3 out on beaches up and down the Chukchi Sea coast.
4 Mitigation measures need to be in place to make sure that
5 those walrus aren't disturbed, that stampedes aren't
6 occurring because of helicopter traffic or airplane
7 traffic or ship traffic associated with oil and gas. Lots
8 of birds depend on the Chukchi Sea. They need to be
9 protected from oil spills especially, but also from
10 colliding with ships. So the appropriate lighting needs
11 to be a standard mitigation measure in the EIS.

12 In the fall time, Chukchi Sea villages are
13 starting to hunt bowhead whales. The ice in the
14 springtime isn't as good as it used to be. So it's harder
15 for communities to hunt bowheads in the spring. So
16 Wainwright is an example. They hunted a bowhead last fall
17 for the first time in a long, long, long time. Point Lay
18 has gone hunting in the fall time for bowheads, as well.

19 So there needs to be a closing date or a window
20 when there isn't industrial activity in the Chukchi Sea in
21 order to allow for bowheads to be available to the
22 communities here for hunting.

23 Many people have talked about oil spills, and I
24 don't need to go into that too much more, although I would
25 like to add one thing. The Deepwater Horizon incident

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1 showed that oil companies aren't prepared to respond to a
2 large oil spill, even though they say they are. In
3 reality, things just don't work the way they would like
4 to.

5 I think the same is true here for the Arctic. I
6 think if oil companies are allowed to drill -- or before
7 they are allowed to drill, they should demonstrate their
8 ability to clean up oil that's spilled in open water
9 seasons and in broken ice seasons and in an ice covered
10 season. So more emphasis needs to be put on the ability
11 of companies to respond to an oil spill showing that they
12 can clean it up.

13 I'm pleased that BOEMRE decided to evaluate the
14 impacts of a large oil spill in the Chukchi Sea. And
15 there is a lot of information that's needed to be able to
16 respond to it, to be able to assess risks and be able to
17 respond to a big oil spill or a small oil spill, for that
18 matter. We don't know a lot about the surface -- water
19 circulation patterns, and if we don't know that, it's
20 really hard to estimate the trajectory of spilled oil or
21 the fate of spilled oil. What beaches might it end up on?
22 And that information will help for deploying oil spill
23 cleanup equipment before an accident happens.

24 I know that your agency, Jim, is trying to
25 gather some of that information, but a lot more is needed

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1 before oil companies should be allowed to go out and work
2 out there.

3 The issue of dispersants and how the dispersants
4 themselves affect the animals, the plants and mammals in
5 the ocean is needed. And are dispersants actually better
6 than just letting the oil be out there by itself? These
7 are really important questions that remain to be answered.
8 And if people are going to dump dispersants on the oil but
9 it actually makes the situation worse, that shouldn't be
10 considered. So we need more information before we try to
11 use things like dispersants.

12 And finally, I wanted to make a comments on
13 cumulative impacts. The revised EIS has about 13 pages
14 related to cumulative impacts. And unfortunately, that's
15 not sufficient, and unfortunately the cumulative impact
16 section doesn't even include evaluation of what a large
17 oil spill might -- how that might contribute to cumulative
18 impacts.

19 So even though the judge didn't tell you to
20 evaluate a large oil spill, it should have been evaluated
21 in the cumulative impact section, as well. And I think
22 that should change between now and the final EIS.

23 That assessment, the cumulative impacts
24 assessment section, is also not sufficient because it
25 doesn't consider activities in Canada or Russia that are

1 foreseeable, that are known. There is oil and gas
2 activities that are going on in both places. I know that
3 Russia has seismic shoots planned for the Chukchi Sea this
4 year. Why isn't that considered in the EIS? If I know
5 it, certainly the federal government knows it.

6 So please make sure that the cumulative impact
7 section is comprehensive and does include all of the
8 foreseeable activities that are occurring. And those
9 activities need to include areas where the animals that
10 occur here, where they go to. And that includes Russian
11 waters and the Bering Sea.

12 And so one final thing is there was a tragedy in
13 Japan earlier this year, and a nuclear power plant has
14 leaked radiation, and we have received lots of calls
15 suggesting or expressing concern that radiation may be
16 impacting the subsistence resources. And so my suspicion
17 is that radioactive impacts to resources up here is
18 probably minimal, but I think it needs to be evaluated,
19 especially in the cumulative impacts section. Monitoring
20 needs to occur, and that needs to be evaluated.

21 And then one final statement on monitoring
22 that's in the mitigation section. There is a statement
23 that oil companies need to do resource-based monitoring.
24 They need -- there will be studies that they need to do.
25 And I think that the agency needs to require that the data

1 that the oil companies collect on environmental issues,
2 not from what's happening in the drilling or what's
3 happening -- or the data they get back from the seismic
4 exploration, but the environmental data needs to be
5 publicly available. They are using a public resource, and
6 all that information needs to be available for the public
7 to evaluate, as well.

8 Thank you again for hanging in here late into
9 the evening and for taking comments from me and other
10 folks.

11 DR. JIM KENDALL: We are not done yet.
12 Don't go away. Back here. Anyone?

13 MR. NATHAN HENRY: Before I go, I have one
14 more before I go. Nathan Henry, again, before I leave.
15 Let's see. I think that oil spill was in Louisiana
16 somewhere. I'm pretty sure if somebody knew that --
17 nobody knew that there was going to be an oil spill,
18 probably. I'm pretty sure if somebody knew that there was
19 going to be an oil spill, I'm sure somebody would have
20 went out into the ocean and did a lot of -- I shouldn't
21 say slaughtering because the oil already slaughtered them.
22 I'm pretty sure that people would have went to the ocean
23 and got as much as sea life as they could possibly get and
24 store it to the cellars or freezers or wherever.

25 And we don't know if there is going to be an oil

1 spill out there or not. Should we go out there and
2 slaughter the animals, the sea life before the oil does
3 or -- we don't know.

4 DR. JIM KENDALL: Good comment. Thank
5 you, Nathan.

6 MR. DANNY PIKOK, JR.: Danny Pikok, for
7 the record. I heard a lot of good testimonies in just a
8 short few hours. And I just want to let everybody know
9 that I keep hearing we, we, we. And when I hear that word
10 we, we are talking about everybody, not just the Arctic.
11 We are talking about the United States, our nation. And
12 just by watching science, biology, the ocean current up
13 here, it goes around the globe. So if we have an oil
14 spill up here, it's not only going to affect us. It's
15 going to affect wherever that current is going.

16 And I believe that, you know, God helps those
17 who helps themselves. So help us help you. Let's work
18 together. We are united -- what's that word united means?
19 We are as one. So let us be a stepping stone. We are in
20 control. This is our nation. We work together, and by
21 saying no to offshore drilling, we are still -- we are in
22 control.

23 Just like I mentioned earlier, let's keep
24 drilling on land. Let's deplete the oil on land before we
25 even consider drilling offshore. You know, just take the

1 Gulf oil spill, other countries, they are spilling oil in
2 the ocean as we speak. And we have a spill out here, we
3 are going to -- we are going to modify that spill.

4 So I just want to let who is going to decide to
5 lease that sale, I want to let them people know that, you
6 know, it's not only going to affect the people of the
7 Arctic; it's going to affect them, too.

8 And I encourage to be against offshore drilling,
9 especially up here in the Arctic. In that way we may
10 encourage industries to look into conservation. Conserve.
11 Quit making our motors eat gas. Make them smaller. We
12 are going the wrong direction. Just like Willard was
13 mentioning, we are killing our world by using up our
14 fossil fuels.

15 There was another testimony about using natural
16 energy. I believe that just by making this decision and
17 not drilling offshore, we are doing us a favor, the whole
18 nation, everybody. And I just want to let whoever is
19 going to decide to do the lease know that you are going to
20 affect not only us. You are going to affect everybody;
21 the whole nation, the whole world. And I just want to
22 see -- I don't want to see offshore drilling. I don't
23 want to see that Lease Sale 193 go through. And I want to
24 see conservation. You are doing this nation a favor. You
25 are going to help us learn to conserve.

1 I mean, take, for example, our Inupiat values:
2 Conserve, sharing, caring, you know, helping each other.
3 Just like one testimony, talk to farmers. Don't shut them
4 down. By shutting them down you, are encouraging oil
5 industries to drill where they want to drill. Who is in
6 control, fossil fuel hunters or the farmers? We are all
7 farmers here. Native peoples in the Arctic, we are
8 farmers.

9 Just like one fellow mentioned, the ocean is our
10 garden. You know, just look at it that way. So we have
11 an oil spill, it's going to -- it's going to ruin our
12 garden and it's going to ruin our nation. We are -- we
13 the people, we are in control. Who is in control? We
14 are, not the oil industry. So please do not drill
15 offshore.

16 And I hate to admit I am a former oil company
17 employee. And I have seen directional drilling. Take
18 that into consideration. Keep the -- keep the rig on land
19 and let them direct their drill to the oil, not -- not put
20 ships in the water. Take that into consideration.

21 Thank you.

22 MR. DELBERT REXFORD: Delbert Rexford, for
23 the record. I'd like to echo many of the concerns that
24 have happened. I'd just like to add that when -- what's
25 your name, sir?

1 DR. JIM KENDALL: Jim Kendall.

2 MR. DELBERT REXFORD: Jim, when you talk
3 about 35 years of testimony, I had the privilege of being
4 a translator for many of our Elders that have passed on
5 over the years. And one particular Elder was so
6 frustrated of attending meetings over and over again since
7 the discovery of oil and gas in Prudhoe Bay. He said --
8 he told me to translate this. (Inupiaq.) It is time to
9 kick those regulators and agency people in the butt. I
10 couldn't find the heart to translate that. But he said
11 translate it.

12 And this is the frustration of 35 years of
13 repeating our testimony, of repeating our concerns, of
14 repeating protecting our way of life. And when you talk
15 about cumulative effects, you are not even considering the
16 fact that the maritime Arctic is starting to begin.

17 Cruise ships coming through Barrow, through Davis Strait
18 and the Northwest Passage, and then on the Chukchi side,
19 estimating 18,000 marine vessels to go through the Russian
20 side in the name of international trade and cargo
21 delivery.

22 All these cumulative effects are not even
23 included in the Chukchi Sea because of this proposed Lease
24 Sale 193. And the amount of sewage or debris that may be
25 disposed of into the sea. And as Danny stated, all these

1 currents are integrated, whether it's the Atlantic warm
2 Gulf stream or the Pacific stream, or the Bering Sea, the
3 Arctic Ocean.

4 Greenland is proposing to go offshore. The U.S.
5 Coast Guard has already identified hundreds and thousands
6 of vessels over the years that will go through the
7 Northwest Passage and through the Chukchi Sea, the Bering
8 Straits in the name of trade and cargo. Yet, Lease Sale
9 193 is right on the migration path of the bowhead whale.

10 I don't know if you receive any of John Citta's
11 e-mails, but you should -- you should -- I think it's
12 right smack in the middle of it. When we had our Barrow
13 whaling captain's association meeting, right there. The
14 Alaska Eskimo Whaling Commission opposed the offshore
15 development of Lease Sale 193 because of that very
16 concern; not only that, noise pollution.

17 University of Miami 20 years ago proved that a
18 marine mammal can hear 100 miles away. And when -- when
19 then ARCO put Cabot in into the Nelson Lagoon, we had to
20 travel 80 miles to catch whales because of just the
21 generator running. No exploration activity, no drilling.
22 Just the generator of the Cabot drill rig in Nelson
23 Lagoon. Eighty miles away we catch our whales. And by
24 the time we took the whales into Barrow, they were
25 spoiled.

1 Is this what we can look forward to in the
2 future? Do we have to travel further to catch whales in
3 the fall time and tow them in and the meat is no good by
4 the time we get them to shore? That's not what we want.
5 What we want is from our country, from our nation.

6 From Secretary Salazar what we want is the
7 assurance that our marine wildlife, the habitat, the
8 ecosystem, the food chain will be all protected. Willard
9 so eloquently spoke about the -- the clam beds and the
10 mussel beds on the shoal. Critical habitat.

11 When then MMS decided to have the NPRA lease
12 sale -- this is shocking. When they proposed to have the
13 NPRA northwest lease, they said that the Kasegluk Lagoon
14 from Wainwright all the way to Icy Cape was critical
15 habitat. Oh, just a minute. It doesn't stop at Icy Cape.
16 It goes all the way to Kutchiaq, 100 miles of it.

17 So how is BOEMRE going to evaluate 100 miles of
18 lagoon that is considered critical habitat in their
19 previous lease sales within NPRA? Are they going to
20 determine the entire 100 miles of lagoon critical habitat?
21 That needs to be considered seriously.

22 A lot of things have been said, but they have
23 been said from the heart because of the concern for our
24 garden, our air, land and sea. Unlike any other
25 industrial nations, we have clean air to breathe today.

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1 But you take a look at the cumulative effects in Nuiqsut,
2 surrounded by oil and gas industry. The traditional land
3 use areas haven't been impacted. Now they go as far close
4 to Point Hope to harvest wildlife that they were
5 accustomed to harvesting within close proximity to
6 Nuiqsut.

7 Is this what we can look forward to in the event
8 that Lease Sale 193 does occur? Marine traffic increases,
9 marine vessels increases, air traffic in the name of
10 helicopter or other support, airborne traffic increases.

11 BHP alone affected the caribou here in Point Lay
12 when they did a short little study. That's common
13 knowledge in the community. And these are concerns that
14 we have, not only in this village; up in Barrow, in
15 Wainwright, and elsewhere.

16 I do believe that as people, my fellow tribal
17 members as a tribal council member with the Inupiat
18 Community of the Arctic Slope, you know, we talk about
19 airborne pollutants, things that are emitted into the air.
20 And then when them hot gases hit our Arctic area, it's
21 cold and then so they drop into the water. So they become
22 waterborne pollutants and then drop down to the bottom of
23 the ocean. Is this something that our future generations
24 will have to live with?

25 I think when you talk about cumulative effects,

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1 you need to look at what the Coast Guard is saying as they
2 work with Canada to get a deep port in Canada and they are
3 looking at Nome or other areas in Alaska for a deep port
4 so that maritime vessels can even increase right through
5 the migration, right through our ocean.

6 These are cumulative effects that need to be
7 weighed and considered; not just the lease sale itself,
8 but all of these cumulative effects. You are talking
9 about increased emissions, carbon dioxide, carbon
10 monoxide, other pollutants into the atmosphere.

11 They have likened the Arctic to a canary in a
12 mine, and they use the beluga as a canary, sensitive. And
13 this is a beluga harvesting community. It's a whaling
14 community. So when Salazar weighs these things, are we
15 another Amazon? Are we another Indian tribe in the
16 statistic in the future? Are we like our Native American
17 Indian brothers and sisters whose lands have been
18 exploited, whose lands have been taken in the name of
19 resource development? Is this what we look forward to for
20 future generations?

21 Look at the cumulative effects. We know that
22 Holland, Princess and all these cruise ships -- I don't
23 know how many people go into that cruise ship, but I'd
24 imagine 500. I don't know. But that's a lot of waste
25 that also goes into the waters. And the United States is

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1 working with Canada to make sure that those maritime
2 routes are opened up, and that's going to affect our
3 subsistence way of life, also.

4 But I'd like to thank the community of Point
5 Lay, you know. I love to visit Point Lay because I get a
6 chance to go beluga hunting, have some fresh muktuk, visit
7 with family and friends.

8 Just like Barrow. I mean, Barrow is just right
9 on -- right on the same route that this thing is going to
10 hit. It's one current, three currents. Going north,
11 going south, as Willard stated, currents underneath.
12 Because what we do during the whaling season is that we
13 drop a weight to assure our safety on the ice. We go 10,
14 20 fathoms to see which way the current is coming and
15 going to protect ourself from being taken out to sea.

16 It's not just the surface current that Robert
17 alluded to earlier. It's also the current the undertow
18 that is there. And if globs of oil go to that current,
19 how does the industry propose to collect it and to clean
20 it up? We don't -- we don't hear any answers from the
21 industry.

22 But my late father worked hard to protect the
23 bowhead whale and make sure that we continue to harvest
24 the bowhead whale. And I think for those of us that are
25 whalers, we continue to do so because it is our way of

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1 life. It is our tradition, our cultural heritage. That
2 is far richer than any cow or any chicken can be valued.
3 Yes, the farmers and the mass producers of those products
4 reap the benefits, but it's not the same. There is no
5 spirituality linked with it.

6 Like when we eat our oogruk or beluga or whale,
7 when we harvest it, the gratification and the inner
8 satisfaction that you feel whole as a person. It's not
9 the same with hamburger. It's not the same with chicken.

10 But thank you for coming. I always feel at home
11 in Point Lay, and this is the most beautiful season of the
12 year. You are here when something very beautiful happens.
13 And thank you for coming. I do hope Salazar listens, that
14 it doesn't go in one ear and out the other ear in the
15 interest of national security or national interest.

16 But we don't want to be another Amazon Indian
17 tribe, overwritten, discarded and homeless. We don't want
18 to be that because this is our home.

19 Thank you.

20 MS. MARJORIE PIKOK LONG: Hi. My name is
21 Marjorie Pikok Long. I agree with Delbert. He said like
22 35 years ago his parents or the Elders were fighting for
23 something. That was 35 years ago that this is still going
24 on. I was seven years old. And now it's happening now.
25 I'm 42, and I have to speak for my kids because he

1 spoke -- his parents spoke for him. I'm against the
2 proposal that they are doing the offshore drilling. He's
3 right. We can't raise or harvest cows, pigs, you know,
4 animals like down states can do. What we get is from the
5 ocean. It comes by itself naturally. It's the nature of
6 life. We don't go and find it. It comes to us. And we
7 need that. It's like the beluga harvest is only once a
8 year.

9 And just that once a year it's a joyful thing
10 because we barter the food that we get from the beluga.
11 Before we started the whaling, we used to barter our
12 muktuk for whale meat or whale with Barrow or other
13 villages that got the whale. But now that we've got the
14 quota to get the whale meat, now you guys want to go out
15 and go offshore drilling. You guys might as well take
16 away our hunting for the whale.

17 And I don't want to see that because my boy,
18 he's 19. He's wanting to get an idea of what whaling is
19 about because it's being passed on not just from our
20 village, but people from other villages that do whale,
21 they come and help us to teach our kids and the villagers
22 how to get a whale. And I hate to see that gone, too,
23 because now we just finally get to eat whale and enjoy the
24 food they provide us. They provided us with the food and
25 everything, not just our Elders use it for medicine. Our

1 kids, they get sick, the medicine that we get from the
2 clinic doesn't help.

3 The oils, sometimes the mothers rub it on their
4 kids' chest for their cold, like you get thick gunk,
5 nuvuk. I don't know how you -- but nuvuk is something
6 that's, you know, something that's not good to have when
7 you are sick. And the oil that's used to help loosen up
8 the gunk and they use that to rub on their kids and they
9 feed them a teaspoon full of that, too. And that helps
10 those kids get better because the medicine doesn't work at
11 the clinic. And if that's gone it's -- you know, it's
12 hard to get medicine out here, too. It's hard to get
13 anything out here to the Bush area.

14 It took two weeks just for a loaf of bread to
15 finally come to Point Lay, and it takes three weeks
16 sometimes just for hamburger meat to come to Point Lay.
17 We can't afford a \$520 trip from here to Barrow to go from
18 here to Barrow to go get some groceries on our income
19 alone. Sometimes our income alone doesn't make it through
20 the whole two weeks to buy our groceries. We have to live
21 off the food that we have.

22 So our kids are not just being raised by the
23 weight of the -- how they are being raised right now with
24 the White people's way of eating, you know, eating but
25 they are also being taught with our culture. So we're

1 still trying to adapt to their way and our way. And it's
2 not easy to watch your kids grow up in two different
3 cultures when all -- we watch all our Elders before us
4 grow up just being people and not to have to worry about
5 food, not to worry about paying bills, didn't have to
6 worry about buying gas. You didn't have to buy a bullet.
7 But now we have to adapt to this.

8 You guys have given us all these privileges that
9 you guys do, like the whaling. We finally got a quota for
10 the whaling. We had to fight for it. I mean, our Elders
11 didn't have to do that then. They went out and got a
12 whale.

13 And it's harder for us to see our kids have to
14 grow up this way. I know for me it is. I'm speaking for
15 my baby in my stomach right now. I want my baby to grow
16 up to do what I did, to be able to eat what I'm eating and
17 not have to, you know, come to these kind of meetings to
18 be the voice.

19 You know, it should be stopped. Just, you know,
20 stop it. Somebody has got to stop it for us because we
21 may be voicing our voices, but somebody out there has the
22 power to stop it. And I hope somebody out there steps up
23 to it, you know. Listen to us. This is our way of
24 living. Thank you.

25 MR. ROBERT LISBOURNE: Robert Lisbourne,

1 for the record. We say no to offshore drilling. We will
2 continue to say no. So if the government goes out and do
3 this drilling and happens to do a spill, that's stealing
4 from us. What would happen if I stole something from the
5 government? I go to jail, right? We have no authority to
6 do that to the government.

7 So this is very serious. It is our land. We
8 will fight for it, and we have been living off of it for
9 thousands of years. So I'm just saying if they go out
10 there and drill and they do happen to have an oil spill,
11 there goes our food. That's our land. No more use for
12 our land. It's stealing from us. So thank you.

13 DR. JIM KENDALL: Anybody back here? Is
14 it time for a break, a ten-minute break? I see a couple
15 heads shake. Why don't we take ten minutes, and if people
16 want to continue to talk we are going to stay.

17 (A break was taken.)

18 DR. JIM KENDALL: Okay. I think everybody
19 is in the room that's sitting down. And we have gone
20 around the room twice, and we want to make sure no one
21 leaves feeling that they didn't have their say. So
22 instead of going around the room again, I'm just going to
23 ask, who wants the microphone.

24 MR. WILLARD NEAKOK: Thank you. Willard
25 Neakok, for the record. I'm not going to speak for the

1 lease 193 at this time, but I'm going to speak for another
2 village, which is the village of Nuiqsut. I know they are
3 going to have exploratory drilling on the Arctic Ocean.
4 And they are surrounded by oil companies on land. They
5 have to go 30, 40, 50 miles just to go inland to go hunt
6 caribou, ducks, geese, you know, sheep. And now they are
7 going to drill on their ocean.

8 They are covered by three sides, east, west, and
9 south. And now I feel sorry for Nuiqsut for oil companies
10 closing their back door to their -- their ocean. And if
11 that goes -- if that happens, you know, Nuiqsut is going
12 to be surrounded completely. They have to go further out
13 to go hunt bowhead, seals, you know, whatever else they
14 might get.

15 We care for each and every one of our villages.
16 When we hear somebody hurt, gets hurt in a different
17 village, you know, we -- we have our sympathy towards
18 them, their families, their friends. And now their whole
19 village is going to be affected by closing their back door
20 and start having an oil company out there drilling. And
21 they are a lot -- you know, the lease sale that's
22 happening over there is a lot closer than Lease Sale 193.

23 You might be able to see that oil rig, drill rig
24 out there, that ship, you know. I just wanted to, you
25 know, let Mr. Salazar know that, you know, if they let

1 these lease sales happen, the exploratory drilling happen,
2 they are just closing their back door to the Village of
3 Nuiqsut. Because I don't want to have this happen to them
4 like what's happening now because of Prudhoe Bay, drill
5 rigs all over the place. And now you are going to have a
6 rig out in the ocean. Now they are going to have to go
7 further out to go hunt bowheads, even though there might
8 be stipulations to cease their drilling operation for a
9 month or so.

10 You know, that will cost the oil companies money
11 each and every day when they are not drilling. But they
12 got to think of feeding the village for the passion that
13 we have of living off the ocean. I hope that -- you know,
14 if anybody goes to Nuiqsut, I hope this is passed on to
15 them that another village cares for other people, other
16 villages here on the Slope. We are all related somehow,
17 some way. I have relatives in Nuiqsut. I have relatives
18 in every village here on the Slope, whether by marriage,
19 whether by family, extended family, by blood, by marriage.

20 You know, I just feel sorry if that goes
21 through. And even over here, too, if lease 193 goes. You
22 know, people make decisions in the Lower 48. Like someone
23 said, they don't care what happens up here. We care what
24 happens down there with all the storms, all the oil
25 spills, you know. You know, it affects us, too,

1 spiritually, mentally. I hope it doesn't happen to us,
2 you know. I would say that I'd hate to be those people
3 going through tornadoes, floods, oil spill.

4 I hope there is a lot of compassion out there to
5 say I hope that, you know, the lease sale doesn't go
6 through and it's been approved for oil to be explored,
7 drilling because, you know, like I said, we care for each
8 other. We are supposed to care for each other. You know,
9 we send money to different parts of the world, you know,
10 in case a natural disaster happens or what like happened
11 in the Gulf of Mexico or at Prince William Sound. We
12 don't want it to happen to us.

13 And when I wrote my article for the newspaper,
14 you know, I don't want to see what could happen to our
15 animals, our way of living. I don't want to see what
16 happened down there happen to us up here. You know, we
17 have a lot of fisheries down there in Bering Sea. We have
18 a lot of crabbing. We have, you know, walrus, marine
19 mammals that are going to be affected, not only here on
20 the North Slope, but we have currents that go to Russia,
21 Greenland, Norway, currents that not only goes through the
22 Bering Straits, but it's going to affect Russia, Chukotka,
23 all different countries if an oil spill like what happened
24 in the Gulf of Mexico.

25 But most of all, you know, if the other lease

1 sale in the Arctic Ocean happens, you know, the Village of
2 Nuiqsut is going to be -- you know, you are just shutting
3 a back door on them. I don't want to see that happen.
4 You know, I care for everybody here on this earth.

5 So I'm grateful that folks came here and get our
6 testimonies. And hopefully Mr. Salazar, like I said,
7 makes the right decision to where we can live our way of
8 life, our cultural values, our heritage on what we do,
9 what we hunt and share.

10 If you look at all these pictures here on the
11 wall, you know, we have spirituality over here. We have
12 togetherness on the other one. And all these pictures
13 behind you, you can see the smiles on the children's
14 faces. Over here, you know, we have old pictures,
15 '50s, '40s, pictures of people that were before us that
16 passed on their knowledge on how to take care of the
17 ocean. We have a picture here of us whaling, not only us,
18 but different other villages along the coast, all up and
19 down the west coast of Alaska down to King Island.

20 You know, if we let the oil companies come and
21 drill and we have an oil spill, it not only affects us, it
22 affects those people down there, too. You can see the
23 happiness in the kids. If we take that away, if we let
24 somebody take that away, our heritage, our way of living,
25 our animals, we won't see those smiles.

1 We will be asking ourselves why -- maybe Mr.
2 Salazar might say, why did I do this, why did I say yes to
3 exploratory drilling. Now look what happened. They have
4 no animals. They can't hunt bowhead. They can't hunt the
5 beluga. They can't harvest walrus, seals anymore because
6 I said yes to exploratory drilling.

7 Mr. Salazar has a lot of weight on his shoulders
8 and, I hope he doesn't make it a lot heavier by saying yes
9 to exploratory drilling.

10 Thank you.

11 DR. JIM KENDALL: Thank you, Willard.
12 Anybody else? I have an open mike. I'm not going to go
13 around and bother everybody. Is that you, Nathan?

14 MR. NATHAN HENRY: Nathan Henry here
15 again. Talking about the oil, maybe scientists should try
16 and do a little experiment, like putting oil underground
17 and oil -- putting the oil and see if -- like, freeze it
18 and see how long will the oil -- see if the oil will keep
19 it cold and see if, where there is no oil, you know,
20 compare like -- because I think if you take a million
21 gallons of oil underground out, it might warm up because
22 maybe the oil might be keeping the ground cool.

23 And if you suck it out, maybe it will probably
24 cause the ground to get warm, and there is a big gap -- I
25 think I said that one time. There is a big gap when they

1 empty out the ground from the oil. There is that big gap.
2 What do they do? Do they fill it in or leave it empty?

3 DR. JIM KENDALL: It fills in.

4 MR. NATHAN HENRY: By itself?

5 DR. JIM KENDALL: Usually with water or
6 salt or something.

7 MR. NATHAN HENRY: But does that warm that
8 area up?

9 DR. JIM KENDALL: I don't know.

10 MR. NATHAN HENRY: See, we don't know,
11 either. And it would just be good if, like, scientists go
12 and check it out see if the oil is keeping the ground cool
13 or the earth cool. I don't know. I just thought maybe
14 I'd say that. Good evening. Quyanapqak. Thank you.

15 DR. JIM KENDALL: I will learn some of the
16 words. Anyone else? I still have the mike here. It's in
17 my hand. It's still on. The battery still works.

18 MR. DANNY PIKOK, JR.: Danny Pikok, for
19 the record. Prime example is back in the early and
20 mid '40s, we had the government stage with radar sites all
21 up and down the coast of Alaska and who knows where else.
22 And modern technology, state-of-the-art technology, got
23 rid of those radars, and it cost the government more money
24 to clean up those sites, clean up those radar sites. All
25 the mess those radar sites caused. And just like deja vu.

1 You want to drill in the ocean, in the Arctic Ocean for
2 oil, and we have a big spill, it's going to cost so much
3 just to clean up a fraction of that oil. So I hope
4 Mr. Salazar takes that into consideration.

5 Just like Willard was saying he's got lots, lots
6 on his shoulders. And if that sale passes, it's going to
7 get worse. So I just hope and pray that he -- he makes
8 the right decision. And again, I'd like to see the oil
9 industry deplete the oil onshore before we even consider
10 drilling offshore, especially in the Arctic. Thank you.

11 DR. JIM KENDALL: Thank you, sir. Anyone
12 else? Going once. You found someone? Going once?

13 MR. DANNY PIKOK, JR.: Danny Pikok, for
14 the record. Just to make one quick comment. I know oil
15 means money, more funding, and that's great. Just
16 drill -- drill in the right place, not in the ocean. No
17 offshore, you know. More oil, more money. Let's -- less
18 oil, more [indiscernible]. So we need to learn to go back
19 to the old ways. And if we keep going in the direction we
20 are now, we are going to lose our old ways, and we are
21 just messing up our nation by relying on fossil fuels.
22 Let's go to natural energy.

23 Thank you.

24 DR. JIM KENDALL: Thank you. Okay.

25 Anyone else?

1 MR. LLOYD PIKOK: Good evening. Lloyd
2 Pikok. And you know, there is -- everybody is relying on
3 oil, you know, throughout the whole world, and there is a
4 population bigger than Point Lay and there is a population
5 bigger than the North Slope, and their demand for oil is
6 bigger than us wanting to stop it. And I believe it's not
7 if; it's going to be when they are going to start
8 drilling.

9 And what do you guys have planned for our
10 communities to benefit off of this? You know, if -- the
11 way I feel it, you know, everybody has got so far to the
12 point where we have to rely on oil unless we can find a
13 renewable resource to live off of. And I feel like, you
14 know, you guys should have something in position for us,
15 you know, like the students and the people that are
16 learning here to give us something to learn so that we can
17 do it, because we know the environment more than --

18 You know, everybody has lived off the
19 environment for so long, and I feel that if you guys learn
20 and teach the proper techniques and the proper -- give
21 everybody the proper training, that might end in a safer,
22 you know, conclusion than just coming into our backyard
23 and start drilling. You guys should learn to train us and
24 give us the opportunity to learn it than just say we are
25 going to do it and send people from up there. And find a

1 way for the community to benefit off of what you guys are
2 going to do, even if it's not going to; you know, just
3 give them that proposal of, you know --

4 Because there are students and people around
5 here that want to learn to help and keep it safe because
6 they know the way their environment is and they know
7 exactly how it works. And I just want to know how you
8 guys are going to make the communities that you are going
9 to start drilling in -- if or when, how you are going to
10 make them benefit off of it, you know, because once this
11 oil is gone and if we are going to deplete, we are just
12 going to be here with, you know, nothing because you are
13 going to take our land.

14 And the oil, if it were to come up and it were
15 to mess up our environment, how are we going to be able to
16 stop it? That's all I got to say. Thanks.

17 DR. JIM KENDALL: And that's why we keep
18 going until everyone has a chance to speak. Well said.
19 Thank you. Anyone else? Anyone wants to speak again?
20 Anyone that didn't speak wants to speak? Good comments.

21 MR. DANNY PIKOK, JR.: This just comes to
22 my mind. I have been thinking about it for a while, you
23 know. The more oil we have, the price of oil goes down.
24 And the less oil we have, the price of oil will go up.
25 And that could help this nation to, you know, start

1 conserving, conserve our oil, you know. I mean, if I'm
2 going to buy a gallon of gas and it costs me \$12, I'm
3 going to be real careful how I use that gas.

4 Just take into consideration, Mr. Salazar. More
5 oil, the price of oil goes down or stay the same. Less
6 oil, price goes up. The more we conserve -- the more we
7 help ourselves, the more we can help the planet.

8 Thank you.

9 DR. JIM KENDALL: Thank you. It's Lloyd,
10 right?

11 MR. LLOYD PIKOK: Lloyd Pikok again. And
12 he's talking about conserving our oil, and I think it
13 would be better to make -- you know, invest in ways that
14 can conserve our oil, you know, to make your dollar go a
15 little bit further, you know. Kind of invest in ways that
16 we use oil a whole lot less than when we did before for
17 those Toyo stoves and anything.

18 You build a better environment for the oil to
19 keep going and we will have more oil. We will have more
20 sustainable oil because we know how to use it more
21 efficiently. And I feel like if you guys are going to
22 come in and drill, you might as well find a way to use
23 this oil a whole lot more sustainable than just, you know,
24 burning up half of what you are going to get because I
25 know that when you burn one gallon of oil, you produce 34

1 pounds of carbon monoxide. And that's -- you know, I was
2 taught that in class, and it's hard to forget.

3 And I mean, these houses run at like -- I don't
4 even know how much, but it burns so much oil and that's
5 what's causing us to, you know, look for more is because
6 we are burning more of it. What if we learn to conserve
7 it in a way, you know, into our building, into our
8 lifestyle and we learn to make it so that we run off of
9 that extra dollar. You know, we run off that one gallon
10 of oil and we make it last as long as five, ten gallons.

11 And it would be nice to see if you guys invested
12 in that so that, you know, we can take the opportunity to
13 think about, you know, letting this happen. And we would
14 be -- we would feel more, you know, safe. That would
15 cause the thought of drilling oil a whole lot more. We
16 wouldn't need to drill so much oil if we knew how to use
17 it if we knew the efficiency of how to produce it and then
18 how to use it because the way we are doing it, we are just
19 burning it all up and we are not finding a way to confine
20 it and conserve it.

21 And that's all I had to say. Thanks.

22 DR. JIM KENDALL: Thank you, Lloyd. Well
23 said. Anyone else?

24 MR. LEO FERREIRA, III: Leo Ferreira, III,
25 for the record. I guess I have a small, little comment.

1 Just a crazy idea that I just thought of since I have been
2 hearing lots of talk about our culture and our -- where we
3 hunt at and what we hunt because I already know -- I
4 already have a feeling that the federal government, they
5 will take our comments and use it to make stipulations and
6 regulations for the gas and oil industry.

7 And I just had a crazy idea that since they are
8 going to go do it and go do exploration for oil, and if
9 they do find oil -- and they probably might, but we don't
10 know how much yet -- is that when they do get to that
11 point to start processing and shipping our oil, that the
12 federal government should take into consideration because
13 every village is unique in their own way. Kotzebue
14 depends on fish. It's their yearly supply for
15 subsistence. Point Hope, theirs is bowhead whale. And
16 Point Lay is unique to the beluga. And Wainwright could
17 be bowhead and walrus and so forth. So every village
18 lives a little bit different cultural lifestyle. But we
19 all depend on the same animals.

20 So if we get to past the exploration and get to
21 development, I think the federal government should let the
22 outlying communities regulate and mandate their own
23 wildlife in their areas with the stipulations that we are
24 trying to set forth so that we can harvest our -- harvest
25 our sea animals from the ocean and from the land, that

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1 these stipulations should be in place to help us protect
2 our culture.

3 And I hope they -- it's a good idea, a very good
4 idea, I think, that we should get to regulate our own
5 seasonal hunting and stop being able to stop a ship so we
6 can harvest our bowhead whales or stop the ships for a
7 while so we can harvest our beluga. I think these other
8 villages might want to do other things like they might
9 want a time frame to stop the activity so they can harvest
10 their whale when the whales are passing by on their
11 migration route.

12 That was just an idea. Thank you.

13 DR. JIM KENDALL: Thank you, Leo. With
14 those words, do we want to take a vote and have Leo's
15 comment be the last comments? Going once. Going twice.
16 You want to get the last comment?

17 Good night. Going three times. Thank you very,
18 very much for hanging in there. We had a good meeting.
19 Good comments. And we will be back to share. Thank you
20 very, very much. Have a good night.

21 (Proceedings adjourned at 11:30 p.m.)
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23
24
25

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1 REPORTER'S CERTIFICATE

2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:

4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.

12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.

15
16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska

20 My Commission Expires: November 5, 2012
21
22
23
24
25

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PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Anchorage, Alaska

Taken June 29, 2011
Commencing at 7:05 p.m.

Volume I - Pages 1 - 118, inclusive

Taken at
Wilda Marston Theater
Z.J. Loussac Library
3600 Denali Street
Anchorage, Alaska

Reported by:
Mary A. Vavrik, RMR

A-P-P-E-A-R-A-N-C-E-S

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Bureau of Ocean Energy Management, Regulation
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Taken by: Mary A. Vavrik, RMR

BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

P-R-O-C-E-E-D-I-N-G-S

DR. JIM KENDALL: Good evening. Welcome
to the Revised Draft Supplemental EIS for Sale 193 public
hearings. That is a mouthful. You don't have to remember
that because after the brief introduction here, one of my
colleagues are going to give you a briefing on exactly
what this is so we all start from the same knowledge base.

You know, there are a lot of misconceptions
about what this is, so we'll go through a series of flip
charts so we know why we're here today.

Now, who am I? My name is Jim Kendall. I'm
Regional Director of the Alaska OCS Region of a very long
acronym: The Bureau of Ocean Energy Management,
Regulation and Enforcement, or BOEMRE, for short.

Now, BOEMRE is not an oil company. We are not a
nongovernmental organization. We are a federal agency or
bureau within the Department of the Interior responsible
for managing the energy and mineral resources on the Outer
Continental Shelf. We are a regulator and a manager. We
do our best to be unbiased, collecting information and
pass that up the chain of command to the decisionmaker.
And as you are going to hear, the decisionmaker in this
case is the Secretary of the Interior. So we are Feds.
We collect information. We are not decisionmakers. We
pass that information up the chain.

Now, with me on the floor here is Jeffery Loman.
Jeffery Loman is Deputy Regional Director for the Alaska
OCS Region of BOEMRE. Up on the stage is Mike Routhier.
Mike Routhier is an EIS coordinator for the document you
are going to hear about. And then we have got Sharon
Warren. Sharon Warren is the project manager. Her job is
to make sure things happen on time. And with this
document it's real important that things stay on time, and
she can tell you why.

Now, sitting right next to Sharon is Mary
Vavrik. Mary Vavrik is our court reporter. Because we
value everything that's said here tonight, she is
recording everything. And so we need to give her some
help. Please state your name before you begin your
comments. You don't have to talk too fast because she's
an incredible typist. So slow down.

Also, to make sure everyone has a chance to
speak, we are going to ask you to limit your comments to,
say, three to five minutes. If you have written testimony
that's longer, try to summarize it and provide that
summary, as well as any other paperwork you have, any
notes, to us and we will give it to Mary. That way we
will make sure we have a complete record. All right?

Then after we go through this introduction of
what this document is, we are going to go into the public

1 comment part of this. And we are going to try something a
2 little bit different. We tried it in Fairbanks, and it
3 worked great. Everybody that came in that wanted to speak
4 signed that little piece of paper. It goes in the basket,
5 and then we picked them out of the hat, so to speak. And
6 that's the order in which people speak.

7 Now, what happens is if your name is pulled and
8 you are in the hallway? Don't worry. You don't lose your
9 chance. It goes back in the basket. We pull your name
10 again to make sure you have a chance. If people show up,
11 they have got kids at soccer, basketball, baseball,
12 whatever, and they don't get here for an hour, they
13 haven't lost their opportunity. They can write their name
14 on a piece of paper, provide it to one of our staff, and
15 it goes in the basket.

16 Our goal here is that no one leaves this room
17 unless they are 100 percent confident they had a chance to
18 speak their piece. This is real important. We are
19 collecting information and we provide it to the
20 decisionmaker. And you all are the stakeholders in this.
21 And so it's important that we all say what we believe. We
22 get it in writing, and we keep it orderly.

23 So with that, since I'm talking too much
24 already, I'll turn it over to Sharon Warren.

25 MS. SHARON WARREN: Okay. Thank you. Can

1 everybody hear me with the mike? All right. Again, like
2 Dr. Kendall said, we are going to go through a short
3 presentation of why we are here. Why we're here today is
4 to get your comments on the Revised Draft Supplemental
5 Environmental Impact Statement for the Chukchi Sea OCS
6 Lease Sale 193.

7 Prior to the lease sale, we issued an
8 environmental impact statement. We had the lease sale in
9 February of 2008. There was 29.3 million acres offered.
10 2.8 million acres was leased. And 487 leases were issued.
11 There were six companies that received the rights to
12 explore for oil and gas.

13 Then what happened? Again, the lease sale was
14 in 2008. Days before the lease sale, the plaintiffs sued
15 our agency because the EIS did not adequately, per the
16 allegations, did not assess the potential environmental
17 impacts.

18 In July of 2010, the U.S. District Court for the
19 District of Alaska issued a remand order to our agency and
20 said you need to go back and take a look at your
21 environmental impact statement. The judge had three
22 concerns concerning the environmental impact statement,
23 and are following the National Environmental Policy Act.

24 The three issues the Court wanted us to address
25 was the Court said that our EIS failed to analyze

1 environmental impacts of natural gas, despite industry
2 interest and despite the agency allowing for incentives.
3 So the judge said, you allowed incentives, but you did not
4 analyze the environmental impacts.

5 The judge also said the agency failed to
6 determine whether the missing information identified by
7 the agency was relevant or essential to making the
8 decision. The federal regulations state the requirements
9 of what you're supposed to follow when you state in there
10 that you have missing information. There was an exhibit
11 that was filed with the Court that pointed out all places
12 in the environmental impact statement where we said we
13 were uncertain, information was unknown, there was missing
14 information in order to make an analysis.

15 So the judge said you need to go back and take a
16 look and follow those regulations to assess that. And he
17 also said that we failed to determine whether the cost of
18 obtaining the information we said that we were missing was
19 exorbitant and the means of doing so was unknown.

20 So what did we do as an agency as to respond to
21 the court order? We drafted a supplemental environmental
22 impact statement to address the Court's remand. We
23 released the draft supplemental environmental impact
24 statement in October of 2010. We went out to the
25 communities, had public hearings. We also had some

1 hearings in Anchorage. Many of you may have attended
2 those public hearings in Anchorage. And we also had
3 government-to-government meetings, as well. We received
4 about 150,000 comments on that draft supplemental impact
5 statement.

6 And I'm going to let Mike explain what happened
7 next on this and where we are going today.

8 MR. MICHAEL ROUTHIER: Now, normally in
9 the NEPA process, you recall with the draft EIS we had the
10 comments and in a relatively short time afterwards, there
11 was the final EIS. Here it was sort of a special case.
12 We received, as Sharon said, over 150,000 comments. Those
13 are in addition to all the comments we received at the
14 public hearings we held in the villages as well as
15 Anchorage. And we noticed a recurring theme in many of
16 the comments, and that was we needed to look at the
17 environmental effects of a very large oil spill.

18 Now, this was occurring on the heels of the
19 Deepwater Horizon event that was on everyone's mind, and
20 we as an agency sat down and considered those comments and
21 made a decision that, yes, it would be appropriate to
22 analyze the environmental effects of a very large oil
23 spill. And that is something that the decisionmaker
24 should be cognizant of.

25 So we spoke with our geologists. They provided

1 a reasonable scenario for -- I should say a hypothetical
2 scenario of what was really an extreme case, and we then
3 provided that scenario to our environmental analysts, our
4 wildlife biologists, our oceanographers, our air quality
5 experts, and they provided us with an analysis of the
6 environmental effects.

7 So I mentioned several times tonight the concept
8 of a very large oil spill. What is that? Well, basically
9 it's an analytical tool, something we use in our NEPA
10 document to make a decision -- make the decisionmaker
11 aware of potential impacts. It's hypothetical. It's an
12 extreme case. It's not tied to a specific well, and it's
13 not to be confused with another term you might hear in the
14 context of oil and gas activities that's going to be a
15 worst-case discharge.

16 Right now, we are at the lease sale stage.
17 Before any exploration would occur in the OCS, several
18 things need to occur. We need to finish this document;
19 the Secretary will need to approve all the leases; the
20 courts will sign off on it; companies need to submit
21 exploration plans, and we need to review that and approve
22 that.

23 So we are a long way off before any exploration
24 plan is considered, but the worst-case discharge is
25 specifically required by our regulations to be a part of

1 an exploration plan down the road. It's different than
2 the very large oil spill. It includes a lot more
3 information than a very large oil spill scenario. For
4 instance, at that point, we would have a specific
5 location, a specific type of well, a specific type of
6 technology proposed to be used to drill that well. So the
7 worst-case discharge would be much more specific, include
8 a lot more information. [indiscernible] analyze the very
9 large oil spill scenario that's included in this document.

10 MS. SHARON WARREN: So what do we need
11 from you today? We need your comments today. As I said,
12 we're here because of the revised draft supplemental
13 environmental impact statement. We have documents, hard
14 copies, out there at the sign-in desk. If you have not
15 received one, please take one. We have CDs available, as
16 well. Please take one. We also have a guide to how to
17 submit your comments using regulations.gov. So if you
18 haven't used regulations.gov, there is a guide out there
19 that will walk you through on how to submit comments on
20 that website.

21 Also, if you have any questions concerning --
22 after you're looking at that, you can call our office and
23 somebody will help you walk through. So again, we want
24 your comments.

25 Your comments are due by July 11th, so that's

1 just a little bit down the road here. So -- and then
2 there is a website for you to go to as well. It's on the
3 trucks out there. If you get the handout, it will have
4 it.

5 Also I want to point out, when we take a break,
6 we do have the maps up on the wall so that you can take a
7 look at the lease sale area. Everything is on the table
8 for the Secretary of Interior to decide concerning the
9 lease sale. So he will make that decision on the size of
10 the lease sale and concerning the alternatives that are in
11 the supplemental environmental impact statement.

12 What happens after these hearings? We receive
13 your comments, and the analysts will go through your
14 comments. We will prepare a final supplemental
15 environmental impact statement. Within that final
16 environmental impact statement will be responses to your
17 comments, possibly changes to the document as appropriate.
18 We will also have the public testimony included also in
19 the document so that you can see what was testified, as
20 well as the responses to comments. And we will do the
21 final supplemental EIS.

22 Again, this supplements the lease sale EIS that
23 was done in 2007. So this supplemental EIS at times
24 refers you back to the final EIS. So just so you know,
25 there was an EIS done in 2007. So if you see references

1 to, you know, incorporated by reference of this there may
2 be more documents involved for you to take a look at when
3 you look at this.

4 We are under a court-mandated deadline. On May
5 19, Judge Beistline told us, you know, you go ahead and do
6 something that's additional to the court remand. You do a
7 very large oil spill. How you do it, fine. But you have
8 to have filed in court by October 3rd the final EIS,
9 planned supplemental EIS, as well as the Record of
10 Decision by the Secretary of the Interior.

11 So that's why we are here today. That's why we
12 have a schedule that we have. So the final supplemental
13 EIS will be coming out in early September. That is
14 early -- it has to be out 30 days before the Secretary can
15 make his decision on October 3rd.

16 Once the Secretary of Interior makes his
17 decision, that document and SEIS and his records of
18 decision will be filed with the District Court. At that
19 time there will be briefing with the litigation. We'll be
20 in full litigation on this document, and the judge will
21 decide whether or not the agency met its obligation under
22 National Environmental Policy Act or other.

23 And that's all.

24 DR. JIM KENDALL: We have to move the
25 court reporter.

(A break was taken.)

MR. JEFFERY LOMAN: Senator Giessel, you have the floor.

MS. CATHY GIESSEL: Thank you, Mr. Loman. For the record, my name is Cathy, with a C, Giessel, G-I-E-S-S-E-L. I'm a State senator representing District P here in Anchorage. That's P, as in petroleum. I represent South Anchorage. I'm a lifelong Alaskan, and while I represent -- while I represent South Anchorage, I also provide health care services in the coastal -- in coastal communities around Alaska, in rural Alaska. So I've seen the environment. I've worked in the environment where this kind of development will take place. And I'm speaking in favor of this as lease sale and of the expeditious development of these resources.

You know, the federal government is now releasing 30 million barrels from our strategic petroleum reserves when Alaska holds 40,000,000,000 barrels of potential petroleum that could be developed, meeting energy needs for our country. But it also meets energy needs for our people. Energy needs heat our homes, our businesses, et cetera, but also human energy in the form of jobs. Jobs that allow people to live independently and with the self-esteem of supporting themselves and still live in those communities where the families have lived

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for decades.

Now, you are asking about environmental impact. And you know those questions were asked when Prudhoe Bay was developed and when TAPS was built, the Trans-Alaska Pipeline. And we have shown in Alaska that petroleum development can exist with safe environmental standards. We watched that Central caribou herd on the North Slope increase from 5,000 animals to now over 30,000 animals. It can be done, and I believe it can be done on the Outer Continental Shelf, as well.

Alaska, as a government, is working hard to ensure that all of those emergency response abilities are in place. So I'm speaking on behalf of this lease sale and I urge the expeditious permitting and development.

Thank you.

MR. JEFFERY LOMAN: Would Renee Limoge please report to the lobby. Are you here, Renee? Please report to the lobby immediately.

Mr. Baker, you have the floor.

MR. LARRY BAKER: Good evening, and thank you for the allowing me to testify. For the record, my name is Larry Baker. I'm Chief of Staff for Anchorage Mayor Dan Sullivan. And he's asked me to make comments to you this evening. Mayor Sullivan's jurisdiction spans nearly 2,000 miles and almost 300,000 people. I'm

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testifying on behalf of support for allowing the Chukchi leases from sale 193 to go forward.

The mayor opposes any further delay for development of Alaska's offshore oil and gas resources. Not developing these valuable resources will directly impact the City of Anchorage in ways that greatly concern Mayor Sullivan. Meeting the energy needs of military residents, schools and businesses of Cook Inlet is essential to the personal safety and well-being of all who live here. The economic impact of not to develop the Chukchi resources will be devastating to Anchorage. Our whole economy relies heavily on the health of the Trans-Alaska Pipeline and it is simply essential to get more oil flowing in the pipe.

As a state and a nation, we need to responsibly move forward with domestic offshore energy production. Mayor Sullivan encourages the Bureau of Ocean Energy Management to continue to work to evaluate regulatory structures that improve safety and spill response while making certain offshore energy production is done responsibly.

World events today show without question just how fundamental Alaska's assets are to our nation's security. If the United States government does not provide a reasonable regulatory environment, the

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multinational companies who are in a position to invest will do so outside of our country and therefore will funnel hundreds of millions, even billions of dollars, to outside economies that likely do not have the stringent regulatory framework to support America's interests.

Again, Mayor Sullivan opposes any further delay in development of Alaska's offshore oil and gas resources and urges allowing these leases to move forward.

Thank you for the opportunity.

MR. JEFFERY LOMAN: Thank you.

MS. JONNE SLEMONS: Good evening. For the record, my name is Jonne Slemmons, J-O-N-N-E S-L-E-M-O-N-S. I'm here representing the Alaska Department of Natural Resources and the Division of Oil and Gas.

The State has reviewed the Revised Draft Supplemental Environmental Impact Statement for the Chukchi Sea planning area oil and gas Lease Sale 193. We compliment the Bureau of Ocean Energy Management, Regulation and Enforcement for the work put into this document. Alaska has a tremendous stake in the successful progress of leasing, exploration, and development of the Arctic OCS.

A study conducted by the University of Alaska Anchorage Institute of Social and Economic Research finds that the Alaska economy will be sustained by the addition

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1 of 35,000 jobs with a \$72,000,000,000 payroll over a
2 50-year period with development of the OCS. Development
3 of the OCS would spin off approximately 5.8 billion in
4 additional state and local revenues.

5 Further, OCS development is a prime source of
6 the continued health and diversity of our onshore oil
7 industry. Production from the OCS has several indirect
8 effects, including lower pipeline tariffs and a longer
9 life for the TAPS pipeline, a more robust and lower cost
10 service industry, and longer-lived onshore facilities.

11 It is apparent from our review that you have
12 addressed the Court's three concerns on the original
13 document in a comprehensive manner.

14 In addition, the analysis of a very large oil
15 spill in this revised draft is thorough, addressing the
16 phases of a blowout event and analyzing the impacts that
17 each phase would have on the various resources.

18 In summary, the State concludes that the revised
19 draft supplemental EIS for Chukchi Lease Sale 193 provides
20 more than sufficient support for the Secretary to affirm
21 the February 6, 2008 Chukchi Lease Sale 193, and it is
22 well past time for leaseholders to proceed to the next
23 phase of exploration.

24 Thank you for the opportunity to provide our
25 comments.

1 MR. JEFFERY LOMAN: Thank you.

2 DR. JIM KENDALL: Do we have any other
3 elected officials, State, federal, tribal? If not, we are
4 going to start with the general input here. Now, the way
5 we are going to do this, I've already got three names.
6 I'm going to start one after the other, but I'm going to
7 let you know who is in a row so that you can sort of line
8 up. We want to make sure everyone has a chance to speak.
9 Try to make your comments three to five minutes. If you
10 have got something written, please, Mary would really like
11 it to help supplement her notes. If you have something
12 very long, please try to paraphrase it, but everything you
13 turn in will get recorded.

14 So with that, first on deck is Maya Johnson.
15 Second is Peter Macksey, third is Curtis Smith. So Maya,
16 the floor is yours. And the next will be Peter and then
17 Curtis.

18 MS. MAYA JOHNSON: Good evening. My name
19 is Maya Johnson. When I came to sign in at the front,
20 they asked me if I wanted to testify, and I said, sure, as
21 long as I'm not first.

22 So I have personal interest in the Arctic. My
23 great-great-grandparents, I believe, came over here in the
24 beginning of the 20th century to fur trap, and their son
25 was the first White man born above the Arctic Circle. So

1 the Arctic always been a really important place to me.

2 And this year I have been studying at Dartmouth
3 College, and I took a class on the Arctic because they
4 have a really good cold regions research laboratory there.
5 And we learned that there has not been a lot of -- there
6 is not a lot known about oil spills in the Arctic. And so
7 I was interested, reading the EIS report, that they said
8 that 27 to -- there is a 27 to 54 percent chance of a
9 large oil spill from the drill platform or pipeline
10 resulting from the Chukchi Sea sale 193.

11 I definitely support the development of our
12 resources, but I don't want Alaska to be a boom and bust
13 economy. I want to see the development of our renewable
14 resources. And so I do not support this lease sale.

15 Thank you.

16 DR. JIM KENDALL: Thank you, Maya. Peter.

17 MR. PETE MACKSEY: For the record, my name
18 is Peter Macksey, M-A-C-K-S-E-Y. I'm taking time to
19 encourage you to move forward with Lease Sale 193 and
20 provide expedited permit approvals for this and other OCS
21 development. You are going to hear the same stuff over
22 and over tonight, so I'm just going to stand in testimony,
23 but I want you to know this is self-serving testimony, as
24 I work for oil companies as a fabricator. They are not my
25 only customer, but an important one in my mix. This is a

1 large, but small state. When looking for customers,
2 everyone counts.

3 I'd also like to say that this is the third time
4 I've testified for this. I'm afraid I'm approaching
5 retirement before I'm going to see a well drilled in OCS,
6 and I have a real problem with that.

7 Thank you.

8 DR. JIM KENDALL: Thank you very much.
9 Next is Curtis Smith.

10 MR. CURTIS SMITH: Good evening. My name
11 is Curtis Smith. I work for Shell Exploration and
12 Production, but this evening I am testifying as a private
13 citizen, as a fourth-generation Alaskan who very much
14 benefited from the very first oil boom here in Alaska and
15 as a father of two who would very much like his children
16 to have the same opportunities in Alaska that I have.

17 You know, when I first went to work for an
18 energy company here in Alaska, I really didn't know what
19 the big deal was drilling in the water. As some
20 background, I grew up on the Kenai Peninsula where on a
21 very sunny day you could drive out to the bluff and see up
22 to 13 platforms operating in the Cook Inlet; every day,
23 every night, in the summer, and in the winter ice. And
24 those platforms fuel jobs, the Kenai Peninsula's economy,
25 my personal family's business, and also provide energy to

1 Southcentral Alaska, and they still do today.
2 Those platforms are right in the middle of one
3 of the most prolific salmon runs of all of North America.
4 And it was a shock to me that professional opposition
5 groups would never acknowledge the work and engineering
6 and the environmental responsible operation of the
7 platforms for 50 years, despite the fact those platforms
8 are now right in the path of apparently endangered bowhead
9 whales. Not bowheads -- excuse me -- beluga.
10 As I mentioned, there are five species of salmon
11 that feed very rich rivers and streams in the Kenai
12 Peninsula. So it came apparent me that constantly these
13 professional opposition groups don't want to acknowledge
14 that's happened in Alaska already in the water because
15 it's gone on wonderfully. It has fueled jobs, human
16 ingenuity and prospects for other industries on the Kenai
17 Peninsula and Southcentral for many, many years.
18 So my fear is -- and I'm witnessing this -- we
19 are not all dealing with honest workers. And the dialogue
20 is not always truthful. The other day I read a
21 professional opponent's quote saying that Shell doesn't
22 have any oil spill response equipment in the Arctic, none,
23 which is a shock to me, considering I know that Shell has
24 spent hundreds of millions of dollars on an unprecedented
25 oil spill response field in the Arctic. Unprecedented.

1 The project Shell has in Alaska is defined by
2 its remoteness. It was not a secret to Shell that the
3 leases they were purchasing in Beaufort and Chukchi Seas
4 were in harsh conditions and far away from infrastructure.
5 So that's why Shell has invested everything to bring their
6 equipment and the world's oil response capabilities to
7 this scene. It's never been Shell's intention to, in a
8 worst-case scenario, chase ribbons of oil with thousands
9 of boats across the Arctic.
10 The other day I read a quote from another
11 professional opposition group that said Shell doesn't have
12 any ice class vessels that could work in the aircraft,
13 which would be a tremendous surprise to the thousand men
14 and women who are working right now in Louisiana 24 hours
15 a day to build a second ice class [indiscernible] destined
16 for Alaska.
17 And two weeks ago, finally somebody from one of
18 these professional opposition groups showed his true
19 colors. He was quoted as saying the Trans-Alaska Pipeline
20 has passed its expiration date. So as a fourth-generation
21 Alaskan, and I take from that that we should go back to
22 something close to territorial status. I'm not willing to
23 do that.
24 So I'm here to say, you know, on behalf of my
25 family, certainly myself, I absolutely support responsible

1 development in the offshore. It is absolutely my personal
2 view that others, professional opponents who are not
3 necessarily interested in dialogue or the facts, are past
4 their expiration date.
5 Thank you.
6 DR. JIM KENDALL: Okay. Next three. We
7 have got Jonne Slemmons, and it looks like Ben Mohr and
8 Maynard Trapp or Tapp, T-A-P-P. So Jonne Slemmons,
9 S-L-E-M-O-N-S. Ben Mohr, followed by Maynard Tapp.
10 MR. BENJAMIN MOHR: Well, I'll be brief.
11 My name is Benjamin Mohr, M-O-H-R. I'm a resident of
12 Eagle River. I'm here to testify in support of Lease Sale
13 193 and to talk a little bit about the draft, the
14 supplemental EIS that's going forward.
15 Seems like the incorporation of the worst-case
16 analysis in the EIS is a step further. It's a step above
17 into what was already a robust document. To further delay
18 this lease sale and hopefully the eventual development of
19 the lease just -- stuck on my words, but it's -- it's not
20 going to be good for our state. We are already falling as
21 a place for investment.
22 I was looking at a report earlier today that
23 shows where Alaska falls in regards to other jurisdictions
24 around the world as a place people would want to invest.
25 And the list of countries, the names of places that are

1 more attractive than Alaska, makes my heart break because
2 this is a place where I want to raise my family. This is
3 a place where I want my kids to have incredible
4 opportunities. And the more we tell people that they are
5 not welcome here, the more they will just keep staying
6 away. And we can't afford to do that. We need to have
7 the investment in our state. We need to have the
8 development that comes from our natural resources.
9 So just to close, I'm in support of this lease
10 sale, and I believe that the draft supplemental EIS is
11 complete and robust, and I encourage you to move forward
12 with it.
13 Thank you.
14 DR. JIM KENDALL: Maynard, followed by
15 Renee Limoge and Michael Jespersen.
16 MS. MAYNARD TAPP: I, too, have testified
17 here maybe two or three times before, so I will make the
18 comments brief. But I do want to recognize the men and
19 women that are involved in the war in Libya at this point
20 from the halls of Montezuma. We need to remember that.
21 We need to have an oil energy policy in the United States
22 where we supply our own requirements for oil. The reason
23 for that is the -- there has been many wars started
24 because of the lack of energy, the lack of oil, and this
25 is as important as anything in terms of the environment.

1 The lives and health of our men and women in the
2 Armed Forces, I think, are the -- are equally, if not
3 more, important than an oil spill that most likely won't
4 happen.

5 So we also need the oil from the OCS Lease Sale
6 193 to keep Alyeska's pipeline safe and operable. Right
7 now it's at a very low oil production rate. It needs to
8 have more and more oil supplied to it so it can remain
9 mechanically viable.

10 So thank you very much.

11 DR. JIM KENDALL: Next we have Renee,
12 followed by Michael Jespersen. The floor is yours.

13 MS. RENEE LIMOGUE: Good evening. For the
14 record, my name is Renee Limoge. That's R-E-N-E-E
15 L-I-M-O-G-E. And I'm here on behalf of the Alaska Support
16 Industry Alliance. We are in favor of OCS development.
17 Specifically, we are asking BOEMRE to reaffirm Lease Sale
18 193.

19 The Alliance represents over 400 member
20 companies employing 35,000 Alaskans in the oil and gas and
21 mining support industries. Continued exploration and
22 development of Alaska OCS is vital to the economy of our
23 state and our domestic energy supply. Americans across
24 the nation are faced with high energy costs, and
25 development of the OCS would help relieve some of those

1 costs, while providing much needed jobs here in our state
2 and throughout the country.

3 With the political climate around the globe, the
4 United States should do everything it can to develop
5 domestic energy resources, both on and off shore, rather
6 than depend on foreign oil supplies. In doing so, not
7 only can we employ Alaskans, but we will be assured that
8 development takes place under the world's highest safety
9 and environmental standards.

10 The Alliance and our member companies urge you
11 to let the Chukchi Sea leases move forward and allow this
12 abundant energy supply to be tapped.

13 Thank you.

14 DR. JIM KENDALL: Michael Jespersen.

15 MR. MICHAEL JESPERSEN: My name is Michael
16 Jespersen, J-E-S-P-E-R-S-O-N. I don't work for an oil
17 company. I don't work for anybody that supports the oil
18 company. I work in the tourist industry, and I still
19 support development of the OCS. It's the only way we are
20 going to keep the economy up here going. It will be done
21 responsibly. It won't hurt tourism. Might well be safe.
22 But more importantly, the economy will improve and when my
23 children, who are 15, 12 and two, graduate from high
24 school and college, they will be able to stay close to
25 home and work if we get going now.

1 Don't delay. Let the leases go forward.
2 Expedite permitting and start drilling.

3 Thank you.

4 DR. JIM KENDALL: Okay. Next is Raychelle
5 Daniel, Aves Thompson and Russell Sell.

6 MS. RAYCHELLE DANIEL: Raychelle,
7 R-A-Y-C-H-E-L-L-E, Daniel. And I'm with the Pew
8 Environmental Group, and I'm here speaking on behalf of
9 myself. I grew up in Western Alaska, and I also grew up
10 living on a subsistence lifestyle. And a lot of the
11 species that were important to us went and traversed in
12 the Chukchi 193 area. And so this is an important issue
13 to me. As well as a background as a scientist, it's also
14 an important issue.

15 We are -- we -- the revised SEIS -- the revised
16 draft SEIS, we believe, does not remedy some of the
17 significant flaws from the original EIS, and that's
18 because it doesn't have the necessary data and new
19 analysis of which to fully inform reconsideration of a
20 leasing decision. So the lease stage is a time at which
21 the agency decides whether to commit an area to oil and
22 gas activity. So that's a really important time period.
23 So it's essential that the agency have adequate
24 information about resources and their impacts on those
25 resources.

1 And one of the frustrations -- I talked with
2 scientists about management and policy -- is that a lot of
3 the science doesn't get incorporated. And while we
4 recognize that there is a lot of science that's been
5 conducted -- myself, I've contributed to some of those
6 studies that occurred in the Arctic Ocean -- we would like
7 to see that sound scientific information is applied to
8 good decisionmaking.

9 And so one positive step is the USGS report that
10 was just released this past week. And the Secretary
11 released the report entitled an evaluation of the science
12 needs to inform decisions on Outer Continental Shelf
13 energy development in the Chukchi and Beaufort Seas. And
14 I believe this report is very relevant and highly
15 applicable to decisions for Lease Sale 193.

16 And so with this new information available,
17 BOEMRE should conduct careful evaluation of the USGS
18 findings, the previous studies that have been conducted,
19 such as the NRC cumulative impact study, and produce a
20 clear, coherent strategy for gathering necessary
21 information and conducting appropriate analysis to address
22 key management decisions regarding activity in the U.S.
23 Arctic OCS.

24 And so in conclusion, we think that the
25 Secretary should suspend Lease Sale 193 until the agency

1 has completed the research analysis and synthesis to make
2 informed decisions about drilling in the Chukchi Sea. And
3 if he does not affirm Lease Sale 193, he needs to adopt an
4 alternative that better protects key areas important for
5 wildlife and especially for subsistence purposes.

6 And to make responsible decisions, BOEMRE needs
7 to better understand environmental and social consequences
8 of this activity on the offshore and its potential impacts
9 on species and communities and plan accordingly.

10 So specifically BOEMRE should place a suspension
11 of operations on Lease Sale 193 until there is a
12 comprehensive integrated research and monitoring plan in
13 place, and BOEMRE undertakes a careful evaluation of the
14 findings from the USGS report and produces a clear
15 strategy for gathering that necessary information, and
16 that those important ecological areas are protected.

17 DR. JIM KENDALL: Aves Thompson. And
18 following Aves will be Russell Sell.

19 MR. AVES THOMPSON: Good evening. My name
20 is Aves Thompson. That's A-V-E-S. Last name Thompson,
21 T-H-O-M-P-S-O-N. I'm the Executive Director of the Alaska
22 Trucking Association. The Alaska Trucking Association is
23 an Alaskan trade association comprised of nearly 200
24 member companies representing diverse trucking operations
25 in Alaska. In 2008 Alaska Trucking employed nearly 20,000

1 people, one out of 12 civilian workers. Trucking pays
2 more than \$1,000,000,000 annually in wages and consists of
3 hundreds of family-owned and trucking business companies.

4 Trucks move nearly 33,000 tons of freight each
5 business day in Alaska. Like the rest of the United
6 States, many communities in Alaska depend exclusively on
7 trucking to supply the essential goods that they use in
8 their daily lives. And as in the Lower 48, trucking is
9 the backbone of the economy of Alaska.

10 Since 2005, 680 leases have been awarded to
11 companies interested in exploring for oil and gas off the
12 Alaska coasts. Despite years of applications for permits,
13 community consultation, environmental studies and
14 analysis, and more than \$3,000,000,000 in bonus payments
15 to the federal government and investment in technology,
16 equipment and personnel, not one well has been drilled in
17 Alaska.

18 The leases were sold after an exhaustive
19 environmental analysis. I believe when the federal
20 government awards a lease and accepts payment, it has an
21 obligation to efficiently process permits within a
22 reasonable length of time.

23 Recently, President Obama released a significant
24 amount of oil from the Strategic Petroleum Reserve to help
25 calm the oil markets to try to bring down the price of

1 oil. While this release of oil may achieve some very
2 short-term relief, this action provides no longer term new
3 energy supply for our nation and provides few, if any, new
4 jobs for Americans. I believe the better strategy is to
5 move forward on Lease Sale 193 and other lease potentials
6 to provide not only oil for the marketplace, but also
7 thousands of jobs and billions of dollars in new payroll.

8 To paraphrase Alaska Senator Mark Begich, let
9 Alaska be America's petroleum reserve.

10 There are four important points to be made.
11 Number one, trucking needs oil. Despite the shift from
12 carbon based fuels to alternative fuel sources, diesel
13 fuel will continue to be the prime fuel source for on-road
14 trucking for the next 25 to 50 years.

15 Number two, Alaska needs oil. A recent study
16 indicates that OCS development in the Chukchi, Beaufort
17 and North Aleutian Basin could generate an annual average
18 of 35,000 jobs, payrolls of 72,000,000,000, cumulative
19 state revenue of 15,000,000,000 and potential property
20 taxes to local governments of \$4,000,000,000 over the next
21 50 years.

22 Third, America needs oil. The unrest in the
23 Middle East and other producing areas serves as wake-up
24 call for us to increase our economic production to provide
25 for our national energy security.

1 And lastly, BOEMRE has the ability and the
2 obligation to move the process forward, provide the oil
3 that our industry, our state, and our nation so
4 desperately needs.

5 For these and many other reasons, the Alaska
6 Trucking Association urges the Bureau of Ocean Energy
7 Management, Regulation and Enforcement to move forward as
8 soon as possible in the approval process to allow for
9 exploration and production activities to begin on Chukchi
10 Lease Sale 193.

11 Thank you for your attention.

12 DR. JIM KENDALL: Russell Sell and
13 followed by Mia -- or Mae Hank will be next.

14 MR. RUSSELL SELL: Thank you. For the
15 record, my name is Russell Sell, S-E-L-L. And I am in the
16 oil and gas business. I represent myself and my family at
17 this event. And thank you, Madam Project Manager, for all
18 your work and Mr. Secretary for allowing us to testify
19 here tonight.

20 I would also like to reaffirm the lease sale
21 going forward. And I'd like to say that I come from a
22 certain level of expertise experience. Aside from all the
23 onshore prospects that I've worked on in the Beaufort Sea
24 and the North Slope, I have been physically present on
25 offshore projects in the Lower Cook Inlet on some

1 [indiscernible] vessels, Shelikof Straits, North Aleutian
2 Shelf, Navarin Basin, and I'm pretty convinced that I can
3 count myself as the only individual in this room who has
4 been on an icebreaker and/or a drill ship in the Chukchi
5 Sea in full operational conditions.

6 I am very much concerned about the environmental
7 impacts of our state, but I recognize we have some of the
8 best minds in the industry working towards that end. I
9 hope that the government can supplement those great minds
10 with their endeavors, but we have wonderful, bright people
11 working towards solutions that we hope will meet
12 challenging conditions and prove to be successful.

13 North Slope jobs, North Slope traditional values
14 is something that I work with on a daily basis in my job,
15 and I empathize with what they are concerned with, and I
16 do hope they really succeed in this endeavor.

17 It really is about Americans who choose to live
18 in Alaska. It's about our energy policy. It's about
19 doing things right. It's about sustaining traditional
20 values and enjoying the future for children that are
21 beyond my son's age of 19, but maybe a generation or two
22 from now.

23 So I'm looking for everybody to step forward and
24 utilize their best abilities to make this a success when
25 we get out in the Chukchi Sea, and I encourage

1 Mr. Secretary to look very seriously at this and allow us
2 to do our job, bring jobs to Alaska, bring a piece of the
3 American energy puzzle to fruition.

4 Thank you very much.

5 DR. JIM KENDALL: Forgive me if I'm saying
6 the name wrong. Mia or Mae Hank. Mae, thank you. You
7 are next, followed by Colleen McCarthy and then a Carl
8 Portman. The floor is yours.

9 MS. MAE HANK: Good evening. My name is
10 Mae Hank, M-A-E H-A-N-K. I'm originally from Point Hope.
11 I am a tribal member of the Native Village of Point Hope.
12 And as the gentleman mentioned earlier, he's fourth
13 generation of residing in Alaska. Me, myself, I am
14 hundreds and hundreds of generations that have lived here
15 in the beginning before anybody came.

16 My concern about Lease Sale 193 is that it is my
17 family's hunting ground. It is my -- uncles, my aunts, my
18 brothers, sisters, we all depend on our traditional food.
19 And without it, if there is an event of an oil spill, that
20 would be very devastating because that would eliminate our
21 culture, our traditions, and our religious celebrations we
22 do year-round.

23 I had a few issues about getting this into -- to
24 get it opened again, that our traditional ecological
25 knowledge that we have from centuries and centuries, our

1 people studying the currents, the ocean, the weather, the
2 wind and ice, and how we've survived here has been very
3 well-studied by our people. And for years they have been
4 ignoring our hunters when they speak in opposition of
5 drilling offshore.

6 Our currents are very strong. You have tides
7 here in the Cook Inlet. We have currents. When our tide
8 goes low, it's just a few inches. It don't go hundreds of
9 feet. So we have strong currents in our ocean, and it
10 builds up the ice up to three or four stories high at
11 times, depending on the weather. So that's one thing that
12 needs to be put in there is to -- it needs to be
13 implemented is that our people should be considered the
14 professors of our ocean.

15 We have studied from generation to generation.
16 We handed it down, and that's one thing that our people
17 oppose. We are the ones that live there. We are the ones
18 that will be impacted. Studies need to be done overall as
19 to the impacts of every industry in the United States, and
20 to consider whether that contamination that's been done
21 with mining and factories and industry, is that what we
22 are going to bring to Alaska, too?

23 Everybody that's moved to Alaska had to move
24 because many of them are no longer employed or the mining
25 shut down due to high contamination. Rivers are not

1 fishable. That's what's going to happen here. Cook Inlet
2 has no currents as strong as ours. They have low tide,
3 high tide. We don't have that up north. And that's one
4 consideration you have to think about, too.

5 Traditional ecological knowledge need to be
6 recognized by our people. And I oppose offshore
7 development. I oppose the lease sale 193.

8 Thank you for your time.

9 DR. JIM KENDALL: Next we have Colleen
10 followed by Carl Portman.

11 MS. COLLEEN MCCARTHY: Hello. My name is
12 Coleen McCarthy, M-C-C-A-R-T-H-Y. I am a Shell employee,
13 but I'm here tonight as a private citizen, as a longtime
14 Alaska resident, and as the mother of three children who
15 would like to see a future in this state.

16 I believe that the economic survival of this
17 state is tied to offshore development. And that is
18 because the Trans-Alaska Pipeline, the throughput that is
19 currently operating, is dangerously close to a level that
20 is suboperational. And I think that that has dramatic and
21 very scary impacts on the economic survival of this state.
22 And I also believe very passionately that exploration and
23 development can be conducted in an environmentally and
24 socially responsible fashion.

25 And I encourage the BOEMRE to facilitate

1 exploration and development in the Chukchi Sea.

2 Thank you.

3 MR. CARL PORTMAN: Good evening. My
4 name is Carl Portman, Deputy Director of the Resource
5 Development Council. RDC urges the Bureau of Ocean Energy
6 Management, Regulation and Enforcement Bureau to affirm
7 Lease Sale 193 as held in 2008. The SEIS provides
8 sufficient information and analysis to support a decision
9 affirming the sale.

10 Oil and gas development is absolutely critical
11 to Alaska's future economy. With the Trans-Alaska
12 pipeline system now running at one-third capacity,
13 exploration blocked in ANWR and nondevelopment activists
14 working toward wilderness designations in the National
15 Petroleum Reserve, nothing less than Alaska's future
16 economy is at stake. The responsible development of
17 potentially immense oil and gas deposits in the Chukchi
18 Sea would significantly boost the economy and extend the
19 life of the oil pipeline. Without new federal oil
20 production, TAPS could be uneconomic to operate sometime
21 in the next decade.

22 If there is no oil and gas development in ANWR
23 and the OCS, and the best prospects in NPRA are taken off
24 the table, the federal government must then accept the
25 consequences, including heavy reliance on foreign oil,

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1 soaring trade deficits, a weaker national economy, and
2 compromised national security. For Alaskans, our future
3 will be bleak, with the State losing most of its economic
4 base.

5 Not developing federal oil in Alaska makes no
6 sense from an economic and energy security standpoint,
7 especially given the fact that America imports over 50
8 percent of its oil, and at a great cost.

9 With its enormous potential reserves, the OCS
10 can sustain Alaska's economy for generations. The public
11 interest should compel the Obama Administration to move
12 forward with policy that encourages job creation, supports
13 national energy security while growing the economy and
14 providing the nation with much needed domestic energy
15 reserves.

16 RDC has a high level of confidence that
17 exploration and development can occur safely in the Arctic
18 and that mitigation measures can be put in place to
19 address most concerns. Development can and does occur
20 without harm to polar bears and other species.

21 The SEIS concludes that the probability of a
22 very large oil spill is very minimal, and Shell has
23 defended its ability to quickly cap a highly unlikely
24 blowout and contain and clean up spilled oil.

25 Some groups opposing offshore development will

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1 insist that all data gaps be eliminated before exploration
2 is even considered. In our view, this is unreasonable. A
3 anything scientific record exists in the Arctic and
4 industry and others are well positioned to add to it with
5 new studies, while exploration moves forward in a cautious
6 and responsible manner.

7 RDC will be submitting detailed comments before
8 the deadline, and we thank you for this opportunity to
9 testify this evening.

10 DR. JIM KENDALL: Okay. The next three on
11 deck are Susan Childs, John Sturgeon, and Ron McPheters.
12 And if John and Ron will move up here, that would be
13 great. It will go faster. We want to make sure everyone
14 has a chance to speak.

15 MS. SUSAN CHILDS: Good evening. My name
16 is Susan Childs, S-U-S-A-N C-H-I-L-D-S. So I am here on
17 behalf of Shell Exploration and Production in Alaska. I'm
18 a sustainable development manager for our venture. We
19 always appreciate the opportunity to make public comments
20 to the BOEMRE. Thank you for your hard work and your
21 explanation of what the very large oil spill meant for
22 this EIS and that it's not the worst-case discharge for
23 exploration plans that sit in your hands.

24 It is a bit troubling, though, that the
25 Department of Interior waited six months after the BP

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1 Horizon spill to determine this analysis should be part of
2 a supplemental EIS. You are aware the timelines to
3 operate in the Chukchi and the Arctic are very short, and
4 your late determination that a very large oil spill
5 analysis should supplement your submission to the Court
6 threatens yet another drilling season and the creation of
7 Americans jobs.

8 While Shell acknowledges your attention to
9 ensure proper analyses of impacts from a very large oil
10 spill in the Chukchi, it is also important, as you
11 explained before, that the public understands that the
12 analysis presented in the revised draft supplemental EIS
13 does not take into consideration an operator's ability to
14 respond immediately to an emergency that results from a
15 well controlled situation.

16 For example, Shell's exploration plans since
17 2009 have identified and provided specific information on
18 all response vessels that would accompany a drilling
19 operation in the Chukchi. So that continues to be
20 misrepresented. So for the record, Shell Oil will bring
21 with them oil spill response assets, as has been
22 documented in public for the last six years. Our response
23 to -- our response time to well control scenario is one
24 hour.

25 I do see that the agency has provided a

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1 description of our plans in the very large oil spill
2 analysis. But to avoid creating confusion, I appreciate
3 and I would encourage you to continue to use all
4 appropriate language to make clear the impacts analyzed in
5 that analysis which disregard any response efforts,
6 including Shell's oil spill response plans.

7 So after having said that, Shell can and will
8 meet the challenges presented in our current exploration
9 plans because meeting challenges have always been a part
10 of our plan wherever we were in the world. So our project
11 in Alaska has always been defined by the region in which
12 we aspire to work. So it is remote. You are right. And
13 it's harsh, and it is covered by a multiyear ice 65
14 percent of the year. So believe me, before we spent 2.1
15 billion dollars, we were very aware of the conditions in
16 the Chukchi.

17 We drilled four wells there. We drilled 12
18 wells in the Beaufort. So we know about the Arctic. And
19 we do recognize the traditional knowledge is absolutely
20 paramount to be able to continue to go forward.

21 Shell has already built a 300-foot ice-class oil
22 spill response vessel for the Alaska project, and we are
23 building an even larger anchor handler for use in our
24 Arctic operations. It's being built as I testified before
25 you tonight.

1 These ice-class vessels are centerpieces to our
2 oil spill response fleets, and they cost well over
3 \$100,000,000 each. That's meaningful. That is meaningful
4 to spend over \$100,000,000 each on vessels to make sure
5 that we are prepared. But that's only one example of our
6 investment and dedication to keeping oil out of the water
7 in the Arctic.

8 So Shell has already committed to having in
9 place an Arctic capping system in the event we were to
10 have a spill and we were unable to shut in a well. I'd
11 like to remind you that the last time the world saw a
12 capping system like the one we are building for the Arctic
13 it was shutting in the most prolific deepwater well
14 blowout in the history of this nation. We have modified
15 that system and it will take place in Alaska before Shell
16 ever touches the sea floor.

17 That capping system, combined with our ability
18 to ignite and effectively burn oil slicks, is not
19 actually -- we are not actually given credit or credited
20 when our oil spill response capabilities are calculated or
21 permitted. Nor is our ability to use and deploy
22 dispersants, despite the fact that they have proven very
23 effective in the Arctic.

24 In the big picture, all of this doesn't matter
25 because we are committed to having those tools and assets

1 in the theater because we know that they work.

2 For the wells that we intend to drill in 2012,
3 our recovery margin already exceeds the current planning
4 standard. In fact, Shell's ability to respond to an oil
5 discharge event in the Arctic has always far exceeded the
6 projected worst-case discharge.

7 If in the future that number goes up because the
8 characteristics of the wells we intend to drill or because
9 of a new calculus, we will exceed that number, as well.
10 At the end of the day, it's a plan this agency must
11 approve and I don't intend on giving you any reason not
12 to.

13 But until we get to the point where you are
14 evaluating our ability to respond to a blowout well by
15 well, be fair to the public. Answer the phone and explain
16 to the concerned citizens and members of the press the
17 difference between this hypothetical very large oil spill
18 scenario and the actual factual worst-case discharge
19 analysis that Shell or other operators will apply to every
20 single well that is drilled.

21 Because if one person who is actually interested
22 in this building in understanding what's happening here
23 tonight walks away believing that Shell does not have the
24 resources and the ability to respond to any realistic oil
25 spill scenario in the Arctic, then you have done the

1 public a great disservice.

2 Finally, I want to tell you that we will
3 continue to invest. Shell will continue to invest in the
4 Arctic and in oil spill response and recovery equipment
5 because if a worst-case discharge were to happen, it's our
6 responsibility and ours alone to clean up. Not the state
7 of Texas, not the state of Alaska, not the Coast Guard,
8 but Shell.

9 So I find that very -- actually, I find that
10 very important and not comical at all. And I will tell
11 you that the best rate of return I can think of on that
12 multimillion dollar investment in oil spill response
13 equipment is to never have to use it in the first place.
14 That's our intention. I urge you to expeditiously prepare
15 the final document and the Record of Decision so that
16 Shell can get on with responsibly exploring for new
17 domestic supplies of oil that will help fill the
18 Trans-Alaska Pipeline and create tens of thousands of new
19 jobs for America, which I assume that many could use.

20 Thank you very much.

21 MR. JOHN STURGEON: Good evening. My name
22 is John Sturgeon, spelled S-T-U-R-G-E-O-N. I'm a 41-year
23 resident of Alaska, and I work in the forest products
24 business. I support Outer Continental Shelf Lease Sale
25 193. I support it because I believe it can be done in an

1 environmentally sound manner, that it can be done with 100
2 percent certainty that's not going to hurt the
3 environment. That's not possible. Nothing in this world
4 is 100 percent concern, but I think there is enough
5 safeguards in place that it will reduce that risk
6 substantially.

7 I support Lease Sale 193 because it -- Alaska's
8 economy is still based on oil and gas, and oil and gas
9 production drives our economy and is responsible for the
10 majority of our private sector jobs. It also pretty much
11 100 percent funds the State government. Without the oil
12 money, we wouldn't have the government services that we
13 have today in Alaska and the many benefits we have.

14 I support oil and gas development in the outer
15 shelf because it provides quality of life that we all
16 enjoy here in Alaska. I urge you to move forward with
17 Lease Sale 193.

18 And in closing, I'd like to thank you for being
19 here tonight and giving us an opportunity to have our say.
20 Thank you.

21 DR. JIM KENDALL: Next we have Ron
22 McPheters followed by Tom Maloney, Jeff Jones, and Marilyn
23 Houser. So if you want to move up front, that would be
24 great.

25 MR. RON MCPHETERS: Ladies and gentlemen,

1 my name is Ron McPheters, M-C-P-H-E-T-E-R-S. I'm nearly a
2 lifelong resident of Alaska, married, father of four. I'm
3 also President of the Laborers Local 341 in Anchorage.
4 I'm here to speak on the importance of oil and gas
5 exploration on the Outer Continental Shelf Lease Sale 193
6 should be affirmed as held in 2008. The SEIS provides
7 sufficient information and analysis to support an informed
8 decision affirming sale 193. Rescinding the leases and
9 allowing a de facto moratorium to continue will harm
10 Alaska's economy and discourage future industry
11 investment.

12 Ladies and gentlemen, this is what scares me and
13 our 6,000 statewide members. We are so dependent on oil
14 and gas production we cannot afford any further decline in
15 TAPS throughput. The goal of Lease Sale 193 was to
16 produce oil and gas from the Alaska OCS and boost domestic
17 production from potential world-class energy deposits.
18 OCS production has the potential to refill TAPS, which is
19 now operating at one-third its peak flow.

20 An estimated annual 54,000 new jobs will be
21 created and sustained over 50 years by OCS-related
22 development in Alaska. An estimated \$63,000,000,000 in
23 payroll will be paid to employees in Alaska as a result of
24 OCS development. Many of employees are in our union and
25 other unions.

1 To date 30 wells have been drilled in the
2 Beaufort and five in the Chukchi, all without incident.
3 These wells were drilled in the '80s, utilizing older
4 technology compared to what exists today. Also, over 250
5 studies have been funded in the Arctic, with the majority
6 focused on Beaufort and Chukchi, making the area perhaps
7 the most studied in America. We should continue with
8 additional research, but at the same time move forward
9 with exploration.

10 Those who oppose exploration in the Arctic would
11 study the issue indefinitely and use any data gaps as an
12 excuse for inaction. There will always be data gaps and
13 unanswered questions, no matter where we explore and
14 develop, no matter where exploration and development
15 occurs.

16 Please let us drill for all our kids' sake
17 because without this, we have nowhere else to go. Our
18 economy is one of the last strong ones in the nation.

19 Thank you for your time.

20 DR. JIM KENDALL: Next is Tom Maloney.
21 Tom, the floor is yours.

22 MR. TOM MALONEY: Good evening. For the
23 record, you have the toughest job here.

24 My name is Tom Maloney. That's M-A-L-O-N-E-Y.
25 And I'm a long-term resident of South Anchorage District

1 P, as in petroleum. It was great to hear from my State
2 senator this evening. And it is wonderful to have the
3 opportunity one more time to testify in front of you here
4 tonight. And I must say it is much better to have a
5 little bit more room here compared to where we usually
6 are. So thank you for the continuous improvement.

7 I am 100 percent committed to leasing and
8 developing our resources. It is absolutely incredible
9 that in 1968 Prudhoe Bay was first discovered. In nine --
10 that was nine -- short years, the field was developed and
11 the Trans-Alaska Pipeline system was completed and oil
12 flowed. It was amazing what we used to do in Alaska and
13 in the United States.

14 Since 1977 TAPS has seen over 16,000,000,000
15 barrels of oil flow down that 800-mile beauty that some in
16 here helped build. It has transported North Slope crude
17 safely and reliably and has provided tremendous economic
18 benefits to the residents of Alaska and the United States.
19 In Alaska, we have a saying: No dough without oil flow.

20 It is now 2011 and we are faced with headlines
21 just today of "We cannot afford to let the pipeline die
22 from federal neglect." Senator Lisa Murkowski.

23 Let's quit talking about the same thing and get
24 Alaskans and Americans working again. We used to drill in
25 the Beaufort and Chukchi Sea back in the 1980s. Back then

1 TAPS had over 2,000,000 barrels a day being safely
2 transported. Now she's 70 percent empty and down to about
3 630,000 barrels a day. We can fill TAPS back up again by
4 safely developing our Arctic resources and going forward
5 with the OCS. There is a need to drill to pay the bill.
6 Let's get going. Don't take money for leases and then not
7 allow real work to take place. How about having an
8 economic impact statement in the future.

9 Thank you very much.

10 DR. JIM KENDALL: Okay. I've got Jeff
11 Jones, Marilyn Houser, and I've got three others and then
12 we will be taking a bit of a break. Ten minutes. So
13 Jeff, are you around? Did he leave us? Okay. We will
14 put his name back in there just in case. Marilyn Houser,
15 the floor is yours.

16 MS. MARILYN HOUSER: Hello. My name is
17 Marilyn Houser. That's M-A-R-I-L-Y-N, Houser,
18 H-O-U-S-E-R. I've lived in Alaska for 33 years. I'm just
19 an average person of average means. I'm not someone from
20 a professional opposition group, as was mentioned
21 previously by one of the speakers.

22 It's dark 22 hours a day. The temperature is 20
23 below zero Fahrenheit. The wind is blowing 20 miles an
24 hour. The sea ice is thick, just an average February day
25 in Arctic Alaska. How, pray tell, do we even begin to

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1 address an oil spill in an environment like that 140 miles
2 offshore? I don't care if Shell asserts it has response
3 time of one hour. Promises, promises. Days go by where
4 current North Slope oil workers are not permitted to work
5 outside. It is simply too cold, too hazardous. Exposed
6 human skin can freeze in one minute when it is zero
7 degrees Fahrenheit and the wind is blowing 20 miles an
8 hour.

9 Imagine, just imagine, trying to do anything
10 requiring fine motor movement 140 miles from shore, to
11 boot. Don't tell me there won't be an oil spill. Of
12 course there will be an oil spill. Making mistakes is
13 part of the human condition. No one ever imagined the
14 Exxon Valdez oil tanker would fetch hard ground on Bligh
15 Reef. No one could have imagined a blowout and an
16 uncapped well in the Gulf of Mexico spewing oil for almost
17 90 days, spewing almost 4.9 million barrels of oil. Of
18 course there will be an oil spill.

19 The Chukchi Sea and Arctic Ocean are among the
20 most productive ocean ecosystems in the world.

21 No, no. Just say no to offshore drilling in
22 Chukchi and Arctic Ocean. Please just say no.

23 Thank you.

24 DR. JIM KENDALL: Next on deck we have got
25 Paul Kendall, Jennifer Taylor, and Stacey Dean. Paul?

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1 And then if Jennifer and Stacey want to move down, that
2 would be great.

3 MR. PAUL KENDALL: For the record, my name
4 is Paul D. Kendall and I'll -- I'm sorry. I heard
5 something. My Tim is Paul D. Kendall. In all fairness
6 Mr. James Kendall, there is no relationship, so -- we just
7 had met here a few moment ago.

8 Before we begin, I want to give for a matter of
9 record two documents here. I want to give a letter where
10 I am sending around to multiple institutions in Alaska
11 asking how many barrels of oil Anchorage uses; how many
12 barrels of oil Anchorage uses. You would be amazed what
13 that discussion brought. For example, the mayor sent one
14 of his people who e-mailed me, charged me \$45 an hour to
15 ask his people. Just staggering. But it goes better than
16 that.

17 I'm also going to offer the letter of
18 understanding from the world's largest automobile
19 manufacturers calling for hydrogen to be of sufficient
20 density by 2015. Remember, ladies and gentlemen, the data
21 transcends the individual. Don't ever forget that, if I
22 might be so bold as to make that. So if I can put this in
23 the record for historical purposes.

24 For the record, I rise here in opposition to any
25 kind of development off the coast of Alaska until they can

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1 fill in the blanks. This is where I want to tell you why.
2 There are a multitude of things. For example, until you
3 open your records, we cannot resolve anything until public
4 information becomes public information. And ladies and
5 gentlemen, again, I can't stress enough, the energy
6 belongs to us. All of these companies are a conveyance of
7 opportunity to serve us as a society. The other thing
8 would be that I would not allow it until you give me a
9 list of all of the things that are secret that are what
10 they will nondisclosure, proprietary, which would be
11 called a tricked-up term, a sling term, by the way.

12 Now having said that, I generally am here trying
13 to explain to you as a messenger, I think in some way, to
14 tell you you are much, much more important than you ever
15 dreamed. If I were you, the OCS people, I would tell
16 them, hell, no, you are not putting nothing in out there
17 until we have a comprehensive energy plan in the City of
18 Anchorage.

19 Now, keep in mind, the City of Anchorage is your
20 hub. If you look at it like a wheel, it is from here
21 which you can spawn in an accelerated mode. You can
22 [indiscernible] up everybody in the state. It's just
23 huge, the resources you can bring to bear and you can
24 manifest things and create things. It is not in Juneau,
25 it is not in Barrow, it's not in [indiscernible].

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1 Now, keeping that in mind, I want to mention a
2 couple other things to you. I didn't -- I came here to
3 hear Shell tonight. I thought they were going to give a
4 major presentation.

5 But for the record, before I forget, the
6 Volt is going to be on display at Alaska Sales and
7 Service. [indiscernible]. Late last year I drove an
8 electric vehicle, drove 375 miles, average of 55 miles an
9 hour, and it recharged in six and a half minutes. If you
10 will look up Rossie-Cat, R-O-S-S-I-E-C-A-T, they are
11 putting in 800 watts and they are giving out 10 kw of dry
12 steam. In other words, they are taking 800 watts, or
13 eight light bulbs, and they are getting 100 light bulbs on
14 the other end, in simple terms.

15 But they are adding some hydrogen and some
16 nickel, and the nickel [indiscernible]. They are going
17 into production next year, over 50 scientists.

18 The reason that's imperative for you to
19 understand is because around you things are going very,
20 very quickly. Some things does not make sense in the
21 state of Alaska. If I were you, I would not only ask for
22 the hub of Anchorage to have an energy plan; you should
23 definitely as a family get something formulated, a 30-day
24 plenary with respectful on-camera, sworn-in testimony.

25 What I'm trying to tell you is this: Last time

1 we came to the meeting, I thought we were going to have
2 the list of 68 countries that bring oil into America.
3 Sixty-eight countries. This is just unfathomable. It is
4 not the environmentalists in Alaska. It's not the Natives
5 holding this up. You are being played. Ladies and
6 gentlemen and OCS, you are being played. It's that
7 simple. If you all come together and you tell them, hell,
8 no, you are not going out there. I want to see where your
9 take [indiscernible] is going. I want that TAPS line to
10 be guaranteed to be filled. I don't want some mouthpiece,
11 some politician hanging out in Juneau, some quasi de facto
12 [indiscernible] submitting comments. I want it filled up
13 and I want 50 of those countries taken off the list of the
14 68. Something is wrong somewhere.

15 Now, keep this in mind. These oil companies
16 know something is coming. There is no way in hell we can
17 maintain this particular economic structure in paradigm.

18 And in closing -- and I need to get off here. I
19 don't know what the time is. But it is not about jobs,
20 ladies and gentlemen. These people are playing you when
21 they talk about jobs. It's about the quality of your
22 environment and your community being able to hold
23 sustainable quality so that you can understand what life
24 is about. You cannot do that unless you stabilize your
25 energy in your residential sector.

1 If you all come together and make Anchorage,
2 Alaska an all-electric residential sector, you will launch
3 multiple economies, the like of which will lead the
4 country, if not the world. But if you don't stand up and
5 come together as a family, you are never going to make
6 this. They hear you bickering and squabbling and calling
7 each other foolish names like liberal and conservative.
8 It's just gone nutty.

9 So I'll sit down, Mr. Kendall. It was nice to
10 have met you. And again, I don't think we have a
11 perspective until you can look at 68 countries bringing
12 oil. And I really think if you could see the technology
13 that I see coming with 40 companies launching electric
14 vehicles in the next three years -- and this document --
15 those of you that didn't see it, this document was refused
16 to be printed -- it's only a page and a half -- by Pat
17 Dolburg [ph] of the ADN, Juneau, your mayor; these people
18 are refusing. They have a sense of denial and
19 disconnection. We call it being disassociated. This is
20 just staggering, the potential you have.

21 DR. JIM KENDALL: Next we have got
22 Jennifer Taylor and Stacey Dean. Jennifer, the floor is
23 yours.

24 MS. JENNIFER TAYLOR: Thank you for the
25 opportunity. My name is Jennifer Taylor, and I'm a born

1 and raised Alaskan. I work for Shell, but I'm here
2 tonight representing my family, including my husband, my
3 daughter, parents. They are all Alaskans.

4 I'm here tonight to voice support for
5 responsible development of Alaska's resources. I believe
6 it's vital to our state economy and future generations. I
7 urge you to move forward allowing exploration on these
8 leases.

9 Thank you.

10 DR. JIM KENDALL: Stacey, the floor is
11 yours.

12 MS. STACEY DEAN: Thank you. My name is
13 Stacey Dean, S-T-A-C-E-Y D-E-A-N. I'm a resident of
14 Anchorage. I'm not in the oil or gas or oil services
15 business. I support Shell, and I'd like to see the lease
16 sales continue.

17 Thank you.

18 DR. JIM KENDALL: Again, we are going to
19 try something a little bit different. Instead of people
20 coming in and out disrupting, we are going to take an
21 official ten-minute break. I will warn you, in eight
22 minutes I will be knocking on the microphone, as well as
23 nine minutes, ten minutes starting now. Thank you.

24 (A break was taken.)

25 DR. JIM KENDALL: Lois Epstein, Dave Cruz,

1 Wayne Leighty, Leonard Horst, Mike Faust, Marilyn Heiman.
2 So you may want to move up here. Mr. Loman, would you
3 mind being the next master of ceremonies here? I've got
4 all the ones labeled up through 40. Lois Epstein is
5 first.

6 MS. LOIS EPSTEIN: Good evening,
7 everybody. Thank you, Dr. Kendall and BOEMRE staff for
8 this opportunity to testify.

9 My name is Lois Epstein, L-O-I-S E-P-S-T-E-I-N.
10 And I'm a licensed engineer and the Arctic program
11 director for The Wilderness Society, also known as TWS.
12 We are a nonprofit public interest organization.

13 I've spent over 20 years working on oil and gas
14 technical and policy issues as a consultant and as an
15 employee of nonprofit organizations. I was a technical
16 advisor on the Report to the President in May 2010, which
17 contained recommendations on increasing offshore drilling
18 safety, and I now serve on BOEMRE'S Ocean Energy Safety
19 Advisory Committee. I'm not opposed to oil and gas
20 production in Alaska. My role at TWS is to ensure that
21 oil and gas drilling is done well and in appropriate
22 locations.

23 For the record, and in response to other
24 statements, TAPS is in no danger of shutting down,
25 according to the industry data that was used in the recent

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1 court decision written by Judge Gleason and signed onto by
2 the State.

3 According to that decision, TAPS will operate
4 until 2047 at least, using current reserves. So that's
5 sort of a side show in terms of a discussion in this
6 setting.

7 TWS's position is that BOEMRE needs to take the
8 time needed to make scientifically justified decisions
9 before allowing drilling, including exploratory drilling
10 in the Chukchi. This is true even though the previous
11 Administration issued Chukchi leases, prematurely in our
12 view.

13 As I stated at a similar hearing in Anchorage
14 when the draft SEIS was issued, BOEMRE should reassess
15 which scientific information in Appendix A of the SEIS is
16 obtainable at a cost that is not exorbitant rather than
17 BOEMRE dismissing the need to consider such information.
18 Without such a reassessment, BOEMRE in effect is saying
19 that it has decided to allow exploratory drilling
20 regardless of the impacts. The public needs to know the
21 impacts, however, in as specific detail as possible for
22 rational decisionmaking.

23 Last week the U.S. Geological Survey issued its
24 science gap and sufficiency report evaluating the science
25 needed to inform Arctic Ocean drilling decisions. This

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1 intellectually sound report, which acknowledges that there
2 are data gaps that ought to be addressed prior to
3 decisionmaking, provides critical information that BOEMRE
4 needs to utilize in SEIS development.

5 These gaps cover biological data, but also
6 physical, oceanographic and meteorological data which are
7 certainly relevant to BOEMRE's very large oil spill
8 trajectory modeling. If such data are not relevant or
9 essential, and some of these data may be relatively low
10 cost to obtain, is there any information that BOEMRE would
11 consider essential when deciding whether to offer oil and
12 gas leases in the Chukchi Sea?

13 More generally, BOEMRE should explain the
14 factors or criteria it evaluated in deciding whether
15 information was essential to its leasing decision.

16 Additionally, Secretary Salazar stated when the
17 USGS report was released last week that, "This study is
18 helpful in assessing what we know and will help inform
19 determinations about what we need to know to develop our
20 Arctic energy resources in the right places in the right
21 way." Does it make sense for BOEMRE to ignore the
22 Secretary? To carry out his direction now that the USGS
23 report has been issued, BOEMRE could suspend operations on
24 Lease Sale 193 leases pending further data collection upon
25 which to base future decisions covering whether, where and

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1 how to permit implementation of the leases.

2 The Alaska Federal District Court's recent
3 decision which we heard about earlier that BOEMRE complete
4 the remand process by October 3rd does not prevent the
5 agency from changing its present and, we would consider,
6 flawed course.

7 In Appendix D of the revised SEIS, BOEMRE
8 provided background information on its estimate of a very
9 large oil spill or VLOS. The VLOS analysis is valuable
10 information for decisionmakers and the public, and we
11 welcome seeing that in the revised SEIS. On the first
12 page of the appendix, however, BOEMRE characterizes such a
13 spill as a "low probability, high impacts" event.

14 An academic colleague on the Ocean Energy Safety
15 Advisory Committee forcefully argued in several conference
16 calls that blowouts are not, in fact, low probability
17 events, as there have been 79 reported losses of well
18 control in the U.S. portion of the Gulf of Mexico from
19 1996 to 2009, according to the President's Oil Spill
20 Commission. This colleague, Dr. Leveson from MIT,
21 believes such events should be characterized instead by
22 BOEMRE as low frequency, high impact events rather than
23 low probability, high impact events.

24 In conclusion, it is widely recognized that
25 BOEMRE needs regulatory and other drilling oversight

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1 improvements. We currently do not have the world's best
2 regulatory standards for offshore drilling, contrary to
3 some statements here tonight. To say otherwise is false.
4 My organization has documented those needed improvements
5 to prove -- which were developed by various commissions
6 over the past year following the BP Deepwater Horizon
7 tragedy and has sent them to BOEMRE as part of the 2012 to
8 2017 five-year leasing program proposal. I'd be happy to
9 submit that information to you in a different format, as
10 well.

11 Until those types of improvements occur, there
12 will be infrequent but highly tragic spill events in the
13 Arctic and elsewhere on an ongoing basis. This
14 information, combined with a clear need for collection and
15 analysis of scientific data on the Arctic as discussed in
16 the USGS report demonstrate that BOEMRE is not ready at
17 this time to proceed with offshore drilling in the near
18 pristine Chukchi Sea.

19 Thank you very much.

20 MR. JEFFERY LOMAN: Dave Cruz.

21 MR. DAVE CRUZ: For the record, my name is
22 Dave Cruz, C-R-U-Z. I'm the CEO of Cruz Companies and a
23 lifelong Alaskan. I'm here to testify in support of oil
24 production in the Chukchi and Beaufort Seas.

25 Oil and gas production resulting from the sale

1 of 193 will occur under the world's highest safety and
2 environmental standards. Seasonal operating restrictions
3 minimize the impacts and provides protection for the
4 locals. A whole new government entity was created to
5 ensure that this is done with to highest standards,
6 BOEMRE. Stringent permitting practices. The industry in
7 Alaska has a proven record of being above and beyond
8 requirements.

9 One of the companies that we own, Cruz
10 Construction, and we are an oil and gas exploration and
11 support business. I'll point out that this parking lot
12 that I parked in here tonight, if one of my projects had
13 the amount of oil that is currently spilled on that
14 parking lot outside of this building, I would be shut down
15 and run off the North Slope.

16 Spill prevention and spill response. North
17 Slope and offshore projects in Alaska are the most studied
18 energy basins in America. In my personal opinion, our oil
19 field is the most cleanest and pristine in the world. You
20 will not see oil like I see in this parking lot on any of
21 the jobs that I have been on in the last 30 years.

22 One of our other companies that we started three
23 years ago is Cruz Marine. We are an Alaskan family-owned
24 business. In 2009 to 2011 we invested \$16,000,000 in two
25 state-of-the-art shallow draft tugs for working in the

1 Arctic. They are designed specifically for Arctic
2 service. They are double hulled. We minimized the
3 hydraulics on the outside using electric wenchers. These
4 are the only ABS load line shallow draft tugs in the
5 world. They are big. We custom designed them
6 specifically for the Chukchi and the Beaufort Sea. These
7 vessels are capable of running right up on the beach
8 without damage to the hulls of the vessels and being able
9 to move very quickly to support an operation of this if
10 there was a problem. We are ready.

11 Oil is a global commodity. OCS will boost
12 domestic production, increase American energy supply. It
13 will help on long-term national energy security, and it
14 will fill the pipeline; it's designed to run with oil, not
15 sit empty. Whatever happened to north to the future? In
16 1976 when I graduated from high school, I went to work on
17 the pipeline. Word was it was going to last 20 years.
18 That's a lifetime to an 18-year-old. I was going to be
19 old in 20 years. Today it's 34 years.

20 The only -- the oil industry was our primary
21 means of revenue for our state. It needs to remain so.
22 We must take advantage of our natural resources. Our
23 State Constitution states this. But we need to take
24 advantage in a responsible and dignified way.

25 OCS has been studied to death. The plans are in

1 place. The technology and resources to drill are stellar.
2 We must open OCS. Let's drill it, but drill it right.
3 Can we? Yes, we can.

4 Thank you.

5 MR. JEFFERY LOMAN: Wayne, you are next.

6 MR. WAYNE LEIGHTY: Thank you. For the
7 record, my name is Wayne Leighty. That's W-A-Y-N-E
8 L-E-I-G-H-T-Y. I work for Shell, but I'm here on behalf
9 of myself speaking to tonight as an informed and
10 interested lifelong Alaskan with degrees in environmental
11 science, economics, transportation technology, resource
12 economics, sustainable energy systems, and business
13 administration.

14 Others have spoken already eloquently on the
15 economic benefits of OCS development and oil spill
16 prevention and response equipment and capabilities, so
17 I'll use my time to focus on the stated mission of BOEMRE
18 to manage mineral resources of the Outer Continental
19 Shelf. Prompt finalization of Lease Sale 193 and
20 permitting for exploration as wise resource management for
21 at least four reasons.

22 First, OCS development will enhance existing
23 onshore oil production in both value and volume. Volume
24 will be enhanced by -- or value will be enhanced by
25 reducing transportation costs per barrel with

1 infrastructure operating nearer to capacity. Volume will
2 be enhanced by expanding infrastructure such that some
3 satellite fields become economic. And the additional
4 resource potential for natural gas provided by OCS
5 exploration may also enable construction of a natural gas
6 pipeline that would unstrand a large known reserve with
7 existing production infrastructure. Hence, OCS
8 development is a rare opportunity for resource managers to
9 maximize the value of the resources under their
10 management.

11 Second is the real option value of the
12 Trans-Alaska Pipeline. As declining flow jeopardizes
13 continued operation, failure to progress development of
14 OCS resources may remove the option for future development
15 if TAPS is decommissioned. Hence, there is real option
16 value in progressing OCS development now.

17 Third, regulatory uncertainty for offshore
18 energy development in the United States destroys resource
19 value. For example, these bids are based on expected
20 value, which is a function of the probability of finding
21 and producing the resource and the value of that resource.
22 Prolonged regulatory uncertainty casts doubt on the value
23 of leases, squandering our nations resource wealth. Wise
24 and efficient resource management will seek to establish
25 conditions at the time of leasing to ensure development

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1 post-leasing in order to avoid destruction of value
2 through uncertainty.

3 Fourth, international activity in the Arctic is
4 expanding, including oil and gas exploration. Regulation
5 of these activities is often more lax in jurisdictions
6 outside U.S. waters. Progressive development of the
7 Alaskan OCS can help us set a high standard for operations
8 and get more safety and response equipment mobilized to
9 the Arctic. Again, BOEMRE has a unique management
10 opportunity to foster development of robust Arctic
11 environmental protection in the context of increasing
12 activity by progressing leasing and development in the
13 Alaskan OCS.

14 So this is the resource management context in
15 which the SEIS under discussion tonight exists.

16 In summary, the upside potential of affirming
17 Lease Sale 193 and finalizing permitting for exploration
18 is enhancing a resource in both volume and value,
19 preserving real option value for infrastructure of
20 national importance, and strengthening environmental
21 protection at a regional and ecosystem level.

22 The downside risks of filing affirm Lease Sale
23 193 include destroying resource value through uncertainty
24 and losing the economic value of this resource forever if
25 it becomes stranded without infrastructure.

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1 For all these reasons Lease Sale 193 was wise
2 resource management. Failing to affirm the sale and
3 proceed with permitting for exploration would be very poor
4 resource management.

5 Thank you.

6 MR. JEFFERY LOMAN: Leonard Horst,
7 followed by Mike Faust.

8 MR. LEONARD HORST: Thank you. For the
9 record, my name is Leonard Horst, L-E-O-N-A-R-D; the last
10 name is H-O-R-S-T.

11 Tonight I appreciate the opportunity to speak
12 again, and thank you for that opportunity. I will speak
13 from three different perspectives, if I can. One as an
14 individual Alaskan; two, as a banker and an economist; and
15 three, as a member of the Resource Development Council.

16 I am speaking in support of the affirmation of
17 lease 193. I think it's time we get going and get going
18 quickly. As an individual with three grown children who
19 have all left the state for opportunities that they didn't
20 feel they could gain here, I think the fact that we are
21 talking in the neighborhood of 35,000 jobs on an annual
22 basis is a critical factor. We do need to consider this.

23 You know what? I'd love to visit my grandson in
24 South Anchorage, as opposed to Chicago. I'd love to visit
25 my granddaughter in Eagle River, as opposed to Sydney,

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1 Australia. My kids have been very successful, but they
2 didn't see those opportunities here. I want to see that
3 come back for their kids and generations beyond.

4 Secondly, as a banker I can tell you many of the
5 comments that have been made -- I won't go into all the
6 facts and figures that I had originally planned, but I can
7 assure you that this economy is in a serious condition
8 right now. We need to address what is going on with TAPS
9 now. Alaskans need to realize that the flow through that
10 pipeline at this point is already at a critical stage.

11 Opening of OCS is important and it's timely to
12 do it now. What comes from OCS will refill TAPS, will put
13 a ton of people back to work, and allow us to go forward
14 with this economy for generations to come.

15 Finally, as a member of the executive committee
16 of the Resource Development Council, we are a group of
17 companies and individuals that represent all walks of life
18 across the state of Alaska. We are committed to
19 responsible development of Alaska's natural resources. I
20 believe that we have seen the oil companies, the mining
21 companies, the fisheries, all come forward, the tourist
22 groups; forestry spoke earlier this evening. We know how
23 to develop resources in a responsible way in this state.

24 In conclusion, I do encourage you to move
25 forward immediately to affirm the sale as proposed. Thank

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1 you.

2 MR. JEFFERY LOMAN: Mike Faust.

3 MR. MIKE FAUST: Good evening. My name is
4 Mike Faust, and I am the Chukchi project manager for
5 ConocoPhillips. I'm here today in support of Lease Sale
6 193 for the Chukchi Sea and supplemental EIS that has been
7 released by BOEMRE.

8 ConocoPhillips is one of the largest owners of
9 state and federal leases in Alaska. We are a major
10 operator in the three largest oil fields on the Alaska
11 North Slope, and we operate both the Kuparuk and the
12 Alpine oil fields, as well as a number of smaller fields.
13 We are also an operator in Alaska's Cook Inlet.

14 Our company has decades, decades of safe and
15 environmentally responsible operating experience in Arctic
16 conditions. We also bring decades of experience in
17 preparing permit applications and operational plans for
18 activities in the Arctic.

19 ConocoPhillips sees great potential in the
20 Chukchi Sea. This is demonstrated by our investment of
21 over \$500,000,000 on 98 OCS leases in 2008. Since then
22 ConocoPhillips has spent tens of millions of dollars on
23 environmental studies working with other offshore
24 operators like Shell and Stat Oil, universities, research
25 institutions and local stakeholders on a multiyear program

1 collecting biological, oceanographic and air quality data
2 from the Chukchi Sea.

3 This program has contributed to the existing
4 scientific knowledge base of the Arctic OCS and has been
5 well received by North Slope communities and several
6 environmental groups. These studies are being done to
7 support our plans to drill an exploration well in the
8 Chukchi in 2013.

9 ConocoPhillips has extensive experience
10 conducting exploration, development, and production
11 operations in Arctic conditions in Alaska, Canada, Norway,
12 and Russia. We have developed design standards and
13 operations practices tailored to these challenging
14 conditions. We believe that with proper planning,
15 execution, and regulatory engagement drilling and
16 development operations can be conducted safely and in an
17 environmentally responsible manner in the Arctic Ocean off
18 Alaska's North Slope.

19 As almost everyone knows, Alaska's North Slope
20 production continues to decline with TAPS currently
21 flowing at one-third of the pipeline capacity. Onshore
22 exploration in Alaska has not resulted in discovery
23 sufficient to fully stem the decline in the supply to
24 TAPS. The Arctic OCS waters, particularly the Chukchi
25 Sea, has the potential to significantly extend the life of

1 TAPS, keeping this critical link for domestic supplies of
2 oil in operation.

3 Working together, government and industry can
4 develop a plan for careful exploration and production of
5 oil and natural gas within the Arctic OCS waters. If
6 exploration efforts are successful, new OCS resources
7 would play a vital role in decreasing America's dependence
8 on foreign oil, creating thousands of American jobs, and
9 generating new sources of income for federal and state
10 governments. At the same time, it will assure a steady
11 supply of oil during the critical period while America
12 balances fossil fuel energy use with other types of
13 energy.

14 We are committed to explore the Chukchi Sea
15 responsibly, with respect for the environment, and in a
16 manner that would respect the subsistence way of life for
17 the residents of Alaska's North Slope.

18 In closing, ConocoPhillips supports the
19 supplemental EIS. We commend the BOEMRE for a fine job on
20 that, and believe it provides sufficient information and
21 analysis for the Chukchi sea. We encourage BOEMRE to
22 issue supplemental EIS, affirming Lease Sale 193 and
23 allowing those holding leases to proceed to explore them
24 for Alaska's future economy and the nation's long-term
25 energy security.

1 We intend to provide more comprehensive written
2 comments by July 11th.

3 Thank you very much for this opportunity.

4 MR. JEFFERY LOMAN: Marilyn Heiman. And
5 then Lucy Jean, followed by Kip Knudson.

6 MS. MARILYN HEIMAN: Good afternoon. My
7 name is Marilyn Heiman. I'm the director of the U.S.
8 Arctic Program for Pew Environment Group. And it's
9 Marilyn Heiman, H-E-I-M-A-N.

10 Dr. Kendall and Bureau of Ocean Energy
11 Management, Regulation and Enforcement staff, I want to
12 thank you for the hearing, and I appreciate very much how
13 this hearing is being held. I think it's much more
14 respectful than those in the past and is a clear departure
15 from how they have been held and I felt like everyone here
16 has been very respectful of each other, so I really
17 appreciate that and would love to see even more dialogue,
18 not just testifying back and forth, but among the parties
19 because I think there is a lot of great information being
20 offered here and a lot more can be discussed in a
21 productive way.

22 I have about three decades of experience working
23 on oil and gas issues in Alaska. And I fully understand
24 the importance of oil and gas to Alaska's economy. But
25 Pew's goal, Pew Environment Group's goal is to ensure that

1 the highest standards for science, spill prevention,
2 response and safety are conducted in the Arctic Ocean.
3 And we want to -- we try to take a solutions oriented
4 approach, and we don't blanketly oppose all drilling in
5 the Arctic.

6 We are pleased with BOEMRE that they have
7 included the analysis of very large oil spill in the EIS.
8 We look forward to working with the department on more
9 clearly defining what response capacity needs to be in
10 place to respond to a very large oil spill, including
11 assuring adequate shoreline protection and near shore
12 protection.

13 We have been pleased to see the department
14 has -- the Bureau has proposed new standards, strong
15 standards for safety, but we haven't seen those level of
16 standards for improvements in spill response. We have
17 seen it for containment, but not spill response. And we
18 know that the Bureau is working on that, but we would like
19 to see that happen quickly because oil and gas is
20 happening quickly in the Arctic Ocean.

21 As far as missing science, we were disappointed
22 that the revised EIS didn't remedy the flaws in the
23 agency's initial analysis and did not provide meaningful
24 new analysis with which to reconsider the leasing
25 decision. The recently released USGS report, which has

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1 been mentioned many times today, recognizes that there has
2 been a significant amount of research done in the Arctic,
3 much of it by the Bureau of Ocean Energy Management. But
4 there's critical knowledge gaps that still remain. It
5 also showed that the best -- that the information and data
6 we do have is not synthesized in a way that it best
7 informs decisions on potential oil and gas activities.

8 We encourage BOEMRE to incorporate the
9 information in the USGS report in the supplemental EIS,
10 specifically in filling needed information gaps, working
11 with other agencies to come up with better ways to
12 synthesize and coordinate data and recognizing the
13 importance of traditional knowledge.

14 We clearly need to find better ways to
15 coordinate and synthesize all the research and monitoring
16 that is being done to guide the decisionmaking. And we
17 urge BOEMRE to work with the USGS, NOAA and the Coast
18 Guard, the university, the North Slope Bureau, industry,
19 and all the entities who are working to produce this
20 research to provide a coordinated research program with a
21 one stop shop for the data. The data needs to be readily
22 available for decisionmakers, for permits, but also for
23 responding to oil spills. This data should also be
24 available to the affected communities so they can take
25 part in decisionmaking.

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1 A comprehensive integrated research and
2 monitoring program is essential to provide a framework for
3 decisions on development activity in the Arctic and to
4 help avoid adverse impacts on the environment and
5 subsistence way of life. Some of the things that we said
6 in the past are that, you know, we need to have better
7 information on things, such as wind and currents, to
8 determine where the spills will go and what the trajectory
9 will be of those spills. More information on important
10 ecological areas, sensitive areas, subsistence areas, just
11 to name a few.

12 If the Secretary does affirm Lease Sale 193, we
13 believe he should adopt a modified alternative that better
14 protects important ecological and subsistence areas. We
15 believe also that BOEMRE should place a suspension on
16 Lease Sale 193 leases until a comprehensive integrated
17 research and monitoring plan is in place to guide
18 decisions, critical gaps identified by the USGS report are
19 filled, and a plan is in place that protects important
20 ecological and subsistence areas.

21 Thank you development.

22 MR. JEFFERY LOMAN: Thank you. Lucy Jean.
23 Kip Knudson.

24 MR. KIP KNUDSON: Good evening. My name
25 is Kip Knudson, last name K-N-U-D-S-O-N. I am very

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1 fortunate to be employed by a small refining company
2 called Tesoro. I say small because there is a single
3 refinery just recently built in the country of India that
4 refines double -- just a single plant -- refines double
5 the amount of crude that my entire company does with seven
6 refineries in the United States. We have lost other types
7 of manufacturing in the United States, and perhaps
8 refining is next based on that kind of model.

9 I'm also a volunteer with the Alaska State
10 Chamber. I'm currently Chair of the Board and I would
11 like to note that the 400 members of the State Chamber
12 have repeatedly the last three years listed responsible
13 OCS exploration and development as a priority for the
14 business community in the state of Alaska. And my wife
15 and I are raising a delightful, bright-eyed optimistic
16 nine-year-old who we are telling on a daily basis that she
17 can do just about anything she sets her mind to. And we
18 are carefully protecting her from proceedings like this
19 for fear she might become pessimistic.

20 You know, I said I work for Tesoro. We operate
21 in one of the world's premier oil basins, and yet I'm
22 going to tell you a shocking fact, and that is that Tesoro
23 Alaska has to buy crude from foreign sources in order to
24 manufacture transportation fuels for Alaskans. If you are
25 not aware, the West Coast of the United States is

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1 currently short of crude oil.

2 So the entire west coast from California north
3 has to buy foreign crudes. Mr. Kendall referenced this
4 issue, and he was incensed by it. I'm incensed by it, but
5 there is not an option because there are no new sources of
6 northern American crude coming on-line. And certainly
7 none as prospective as the OCS in the Arctic.

8 It's going to be very important for Alaskans.
9 It's going to be very important for Americans on the West
10 Coast. And it's going to be very important for the entire
11 world that we responsively develop in the OCS. So if you
12 drove to this hearing today, you likely burned gasoline
13 manufactured with foreign crudes.

14 Now, I am sure -- I am 100 percent certain that
15 not one of those crudes had to document even a tenth of
16 that size produced prior to their development. If that
17 doesn't concern you, fine. Keep buying the fuel and keep
18 opposing OCS, and you will get your very large oil spill
19 in some other environment.

20 So I'm telling the story there to highlight a
21 red herring. I'm afraid to mention the word herring. I
22 don't believe they live in the Arctic, and I would hate
23 for there to be a supplemental environmental statement
24 regarding the red herring. However, until that first
25 young woman that testified and my daughter can invent or

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1 arrive at a fuel that is as potent and inexpensive as
2 products made from petroleum, then --

3 And as long as we are importing crudes to make
4 our fuels in the United States, then the most
5 environmental thing we can do right now, regardless of the
6 number of environmental documents that we produce, is
7 responsibly explore and develop the OCS.

8 So in conclusion, as quickly as is legally
9 possible, please use the search and delete function and
10 take the word draft off of this document and then work
11 double overtime to convince Secretary Salazar that the
12 only honest and environmentally responsible solution is to
13 affirm Lease Sale 193. And let exploration begin in the
14 OCS. Thank you.

15 MR. JEFFERY LOMAN: Rocky Dippel is next,
16 followed by Tom Lovas.

17 MR. ROCKY DIPPEL: My name is Rocky
18 Dippel, and I'm a lifelong Alaskan resident. And I'm
19 pretty sure that the Bureau has a copy of this, but I'm
20 going to go ahead and submit it just in case they don't.

21 And I would like to say I fully support, along
22 with our congressmen, our senators, politically opposite
23 parties are in full agreement to move ahead. America is
24 paying \$4 a gallon for fuel. In the Bush they probably
25 pay twice what we are paying. Can someone please explain

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1 to me what the holdup is?

2 Through my eyes, it takes on the appearance of
3 an agenda-driven issue, more than once the effects of this
4 study. Everybody keeps dredging up the Deepwater Horizon.
5 The Deepwater Horizon happened in 5,000 feet of water.
6 The water that we are talking about is less than 200 foot,
7 on the average. Let's keep comparing apples to apples,
8 not apples to oranges.

9 Has anyone done a study of what would happen if
10 we allow this Lease Sale 193 not to move forward? What
11 would happen to the state of Alaska and all development to
12 this point? What would be the unintended consequences?
13 Financially the State will be bankrupt in a few short
14 years because we don't have enough oil for the line. We
15 need to ensure that we write a smart play of our time in
16 history and that we [indiscernible].

17 I was here before the pipeline ever came here,
18 and back then Anchorage was small, didn't take a whole lot
19 to run it. Right now, the City of Anchorage has a pretty
20 significant infrastructure. Without the pipeline, I
21 seriously doubt that Anchorage, let alone the rest of the
22 state, has the financial resources to operate their
23 cities.

24 It will take years to implement what is on the
25 drawing board, but we must give a green light on this

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1 project and the sale and its downstream promises if we
2 expect to move Alaska forward. I tend to disregard the
3 nay-sayers when it comes to all the hype marketing. If
4 you listen to them long enough, a butterfly flapping its
5 wings in Africa causes a hurricane in Florida.

6 And if you think I'm making this up, I have seen
7 TV ads with caribou walking around on the North Slope
8 amongst the trees. And I have yet to see a tree on the
9 North Slope, other than the two that BP has up there.

10 But I'm not against green. I helped put up the
11 Kodiak wind towers, and they recovered 3,000,000. So it's
12 not about taking a shot at the greenies. It's about using
13 what we have, the resources.

14 When it comes to big green, I have to wonder
15 what their agenda is and who finances what they are doing.
16 What do they do to promote the well-being of others? I
17 look at who pays my bills and then the vision gets pretty
18 clear.

19 I've always been a clean camper, and I try use
20 my natural resources wisely. My state is my agenda.

21 Where would Anchorage, Fairbanks, Barrow, or the
22 majority of Alaska be without Big Oil? This facility we
23 are meeting here in is because of Big Oil. But at the
24 same time, I don't want them to run roughshod over us. We
25 need to be real. Trust, but verify.

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1 I fully support sale 193. Real energy
2 independence comes by working with those who can properly
3 develop in a responsible manner both financially and
4 environmentally. Shell Oil has invested over 3.5 billion
5 dollars, along with reams of paper regarding study upon
6 study, environmental impact statements, contingency
7 programs; 30 years worth of paper, and we are still
8 rehashing the current environmental impact statement.

9 I say it's time to allow the players to take the
10 field and drill for independence.

11 MR. JEFFERY LOMAN: Tom Lovas and then
12 Stan Senner and followed after Stan, Keith Silver. Tom,
13 you've got the floor.

14 MR. TOM LOVAS: Good evening. My name is
15 Tom Lovas. That's spelled L-O-V-A-S. I'm an independent
16 consultant operating a company called Energy and Resource
17 Economics. I'm also a member of the board of the Resource
18 Development Council.

19 Many others have spoken quite eloquently to the
20 points they wanted to raise tonight, so I'll be very
21 brief.

22 Without question, the oil production is vitally
23 important to the state and to the -- as well as to our
24 nation generally. And it's imperative that we move
25 forward with offshore drilling and development of the oil

1 and gas resources of the Chukchi Sea area. Sufficient
2 information is surely now available from this
3 environmental review to make an informed decision
4 affirming sale 193. With the potential available from
5 this area, it is incumbent to fully explore the energy
6 potential of this region by drilling and to move to
7 production from this reservoir of energy not obtainable by
8 other means.

9 The OCS is properly viewed as one of the most
10 petroleum rich offshore provinces in the country. As a
11 long-term Alaskan since 1959, I believe the potential can
12 be realized in an environmentally sound fashion, that
13 adequate protections to the environment are in place, that
14 the SEIS as drafted properly addresses the issues, and I
15 support the oil and gas exploration and development from
16 this Lease Sale 193. The sale should be affirmed
17 immediately with this information.

18 And I thank you for the opportunity to comment.

19 MR. JEFFERY LOMAN: Stan.

20 MR. STAN SENNER: Thank you. My name is
21 Stan Senner. That's spelled S-E-N-N-E-R. I'm the
22 director of conservation science for Ocean Conservancy.
23 We are a nonprofit organization dedicated to marine
24 conservation.

25 We believe that the Secretary should not

1 reaffirm Lease Sale 193. I'll confine my remarks to the
2 supplemental environmental impact statement. First of
3 all, we thank you for being responsive to some of the many
4 comments that were submitted on this document, and we
5 appreciate the inclusion of the very large oil spill
6 analysis.

7 Unfortunately, we do believe that the
8 analysis -- the overall analysis does not remedy the
9 deficiencies in the original document. The revised
10 environmental impact statement and its analysis of missing
11 information has not changed significantly from the
12 original draft.

13 As a graduate student in the 1970s at the
14 University of Alaska at Fairbanks, I was part of the Outer
15 Continental Shelf Environmental Assessment Program. I
16 gathered some of the data that led to the lease sale on
17 drilling in the 1980s. Unfortunately, there are some very
18 important parts of those studies that have not been
19 repeated, and now we are talking 30 years later.

20 There is missing information that are
21 fundamental to understanding this ecosystem and how it
22 would be affected by an oil spill, and we have missing
23 information such as fine scale data on currents and winds
24 that make it nearly impossible to project the trajectory
25 of spilled oil. I believe that those kinds of information

1 are essential to doing the job.

2 Out of a long list of missing information,
3 BOEMRE could not conclude -- did not find that even a
4 single piece of missing information was essential to a
5 decision. I do not find that credible coming from the
6 administration that is committed to science-based
7 decisionmaking. Indeed, by the methods that were used in
8 the analysis of missing information, there is no single
9 piece of information that is essential. And if you carry
10 that far enough, no information is essential to making a
11 decision, and I don't think that's what anyone intends.

12 So we believe the agency needs to go back to the
13 drawing board, take seriously the need to address --
14 identify and address missing information. The report
15 bright U.S. Geological Survey will assist in that process.

16 And I would simply conclude by saying that doing
17 it right and recouping the investment, the tremendous
18 investment that the oil industry has made in leases and
19 response and science and all of this, recouping that
20 investment means that we should start out by doing it
21 right, and that means a good base of scientific
22 information.

23 I mentioned I was a graduate student in the '70s
24 working in the environmental assessment program. I spent
25 seven years as a State of Alaska science coordinator

1 following the Exxon Valdez oil spill, and I spent the last
2 year in the Gulf working on the Deepwater Horizon spill.
3 I think I understand something about the importance of
4 good science to uphold our duty here, and we don't have
5 that information yet.

6 So thank you very much.

7 MR. JEFFERY LOMAN: Thank you. Keith.

8 MR. KEITH SILVER: Good evening. My name
9 is Keith Silver. K-E-I-T-H S-I-L-V-E-R. I'm a former oil
10 field worker. However, with the federal government's
11 delay tactics, some caused by federally funded
12 environmental groups, in addition to state taxes, my job
13 and more than 10,000 others were eliminated.

14 I am here yet again for the fourth or fifth time
15 to testify in favor of OCS development. I urge the Bureau
16 of Ocean Energy Management, Regulation and Enforcement to
17 affirm Lease Sale 193 in the Chukchi Sea. Sale 193 is
18 critical to Alaska's future economy and the nation's
19 long-term energy security. The Chukchi OCS has up to
20 29,000,000,000 barrels of oil and a possible
21 209,000,000,000,000 cubic feet of natural gas in place.

22 Besides the importance to Alaska's future and
23 the nation's long-term energy security, there are many
24 more reasons to affirm Lease Sale 193. The reasons are,
25 but not limited to: Helping the nation to respond to

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1 President Obama's recent call for more production. Lease
2 Sale 193 will occur in the world's highest safety
3 environmental standards. The lease sale is in shallow
4 water, not subject to the issues brought to light in the
5 Horizon Gulf oil spill.

6 There are approximately 54,000 new jobs that
7 would be credited and sustained over a 50-year period by
8 OCS-related development in Alaska. It is estimated that
9 \$63,000,000,000 in payroll in Alaska alone as a result of
10 OCS development, many thousands of new high-paying jobs
11 throughout the 50 states with a possible \$82,000,000,000
12 in payroll.

13 Federal, state and local governments would all
14 realize substantial revenue from OCS development, of which
15 the federal government would collect over 167,000,000,000.
16 The lease sale would help to develop U.S. domestic energy
17 sources.

18 Thank you.

19 MR. JEFFERY LOMAN: Laurie Becwar.
20 Laurie? Lynette Moreno-Hinz. Laurie. Thank you.
21 Lynette, you're after Laurie.

22 MS. LAURIE BECWAR: Thank you. I
23 appreciate the opportunity to speak. My name is Laurie
24 Becwar, L-A-U-R-I-E B-E-C-W-A-R. And I'm a
25 fourth-generation Alaskan. [indiscernible] My kids are

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1 five. I'm here because I fully support Lease Sale 193.
2 And when I say support it, I want every lease sold. I
3 want full investment. And the reason I want full
4 investment is because, from an economic perspective, for
5 the federal government, for the state of Alaska, we can
6 receive the most benefit. I'm here representing myself,
7 as I said.

8 I'm also, though, the chair of the workforce
9 readiness for the Society for Human Resource Management
10 for the State of Alaska -- the Alaska Chapter. Excuse me.
11 So the Alaska Chapter is very much involved in workforce
12 development activities. In my employment I'm also
13 involved in workforce development activities of oil and
14 gas. I do work for an energy firm, and I say energy
15 because they are currently here in Alaska trying to invest
16 in oil and gas, but it is a business.

17 You have heard before from some of the other
18 speakers who very eloquently spoke about the economics of
19 the sale. With that economics, from a business
20 perspective, the companies will continue to invest as long
21 they feel there is a benefit.

22 So we have heard on TAPS, we have heard some
23 people say that TAPS, you know, isn't going to stop. But
24 as a prior employee of TAPS in human resources, I can
25 guarantee you that people have been laid off because of

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1 the reduction in TAPS. And it is going to continue.

2 So from workforce development activities, with
3 that full investment, that would allow people within the
4 state of Alaska and the federal government to be developed
5 to the degree that they wish to be developed.

6 We have heard some of the statistics from ISER,
7 the study. Alaska OCS, after a new analysis, will create
8 almost 55,000 jobs per year, which is 145,000,000,000 in
9 payroll. And then over the next 50 years, 200,000,000,000
10 in government revenue. And so with that type of impact
11 from a workforce development standpoint, that will give
12 tremendous opportunities to the people of the state of
13 Alaska and the federal government.

14 Thank you.

15 MR. JEFFERY LOMAN: Thank you. Lynette.
16 And Betsy Lawer is after Lynette. Betsy.

17 MS. LYNETTE MORENO-HINZ: Good evening.
18 My name is Lynette Moreno-Hinz. I'm 52, Tlingit Indian
19 from Southeastern Alaska, member of the Anchorage Tlingit
20 and Haida Anchorage tribes of Tlingit and Haida Indians of
21 Alaska. I'm not speaking for them, just for myself.

22 I was born on the 4th of July in the territorial
23 days before Statehood. For 32 years I've driven a taxi
24 here in Anchorage, Alaska. And today I picked up a woman,
25 a worker from the Prudhoe Bay. She said it had been

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1 snowing, and it did three times this week. I'm very
2 surprised at that. There was still patches of snow up
3 there. Where is summer? There is no summer so far, it
4 sounds like. It sounds like climate change.

5 Who is going to work up there with the weather
6 so messed up? Stop ignoring the Inupiat people of the
7 north. We need alternative energy and not this negative
8 energy. We need green, clean energy. When the ANCSA came
9 about, the big push for oil and gas was shoved down our
10 throats. Now it's time to say goodbye to this industry.
11 The risk is too great and the return is not guaranteed.

12 The Native people of the northern region do not
13 want to give up their way of life. Just look at the Yukon
14 River kings. Look at what it's doing to those people up
15 there. The State says that there is not enough fish to go
16 around for those Native people that are starving up there,
17 and their kids. It's not just the adults.

18 Please include pictures of the Native people and
19 the Native points of view in a supplement that is passed
20 out with your BOEMRE Chukchi Sea drilling manual.

21 I oppose the drilling and the sale of lease 193.
22 These people who say their children are here -- are not
23 here in Alaska and they want their adult siblings here,
24 they are not saying that they want the Native people to
25 survive here and remain here, living a healthy life, too.

1 They don't care about anyone but themselves and want a
2 kind of high-end living. That's what they want. Just to
3 stay that way for them and their families and friends.
4 They are greedy. It makes me sick.

5 Thank you for letting me testify.

6 MR. JEFFERY LOMAN: Thank you, Lynette.
7 And happy birthday. Betsy.

8 MS. BETSY LAWER: I'm Betsy Lawer,
9 B-E-T-S-Y L-A-W-E-R. I'm vice chair of the First National
10 Bank Alaska, but I'm here to testify as a third generation
11 Alaskan. My daughter and her 14 nieces and nephews are
12 fourth-generation Alaskans.

13 I grew up in Alaska without oil, and I remember
14 it well. We had a boom and bust economy. Living was
15 hard, particularly rural Alaska. The discovery at Prudhoe
16 Bay changed all that for Alaska. For the last 40 years,
17 our economy has stabilized. We have had money in the
18 pockets for Alaskans year-round. We haven't had
19 seasonality of jobs that we had when I was growing up.

20 I'm not going to testify about the safety of
21 drilling in the Chukchi because I think people have spoken
22 about that very eloquently.

23 What I'd like to talk about is the economics of
24 Alaska. Folks have spoken about the Trans-Alaska
25 Pipeline, and it's a third full. It's also declining at a

1 rate of six percent a year. Money from that Trans-Alaska
2 Pipeline funds 85 percent of our state general fund. At
3 the point at which that pipeline is closed down, I do not
4 know what Alaska will be able to use to replace that 85
5 percent of those dollars. Those dollars fund education,
6 they fund social services, they fund health care, they
7 fund opportunities for rural Alaska.

8 The only opportunity I see to fund that pipeline
9 is the opportunity to drill in the Chukchi and the
10 Beaufort. There is not another Prudhoe Bay that's
11 available to be discovered, based on information that I
12 know, on the North Slope. So the Chukchi is our economic
13 opportunity for Alaska.

14 Right now, with the Trans-Alaska Pipeline at
15 one-third full, our economy is like a three-legged stool.
16 One-third is funded by federal and state dollars,
17 one-third is funded by the oil industry, and one-third is
18 everything else.

19 If we lose that one-third of the oil industry
20 because there really isn't very much drilling at all going
21 on in the North Slope and there is only maintenance jobs
22 available and those one-third of our jobs head south
23 looking for something else, there is going to be a real
24 estate crash because those people are going to be putting
25 their homes on the market. And existing Alaskans, those

1 people who have their homes on the market, will be losing
2 all the equity that they have for college educations for
3 their children, for their retirement, and so forth.

4 So I think it's very important that you consider
5 the economy of Alaska in consideration and you permit
6 drilling in the Chukchi Sea as soon as possible. Not only
7 is it important for Alaska, it's also important for the
8 country.

9 We still have not come out of the recovery that
10 has lasted several years. One of those is the cost of
11 oil. We need more supply of oil for supply and demand to
12 drop the price down. And drilling in the Chukchi will not
13 only provide jobs in Alaska; it will also provide jobs
14 throughout the country. It will provide jobs as goods are
15 shipped through the Port of Seattle. It will provide jobs
16 as cars are produced in our car companies. It will
17 provide jobs for manufacturing services throughout our
18 country. And I believe it will give the shot in the arm
19 that our country needs to help pull us out of the
20 depression that we are in right now.

21 I thank you very much for the opportunity, and
22 please approve drilling as soon as possible.

23 MR. JEFFERY LOMAN: Thank you, Betsy.
24 Ryan Schryver, followed by John Shively, followed by Kate
25 Williams. Ryan? John? Mr. Shively, and then Kate

1 Williams. Kate, are you here?

2 MR. JOHN SHIVELY: Thank you. My name is
3 John Shively, J-O-H-N S-H-I-V-E-L-Y. I'm here testifying
4 on my own behalf. Among other things that I've done in
5 Alaska is I was formerly the Commissioner of the
6 Department of Natural Resources for the State of Alaska of
7 the Tony Knowles Administration.

8 I'd just like to make a couple points. One I do
9 think that you have enough information to proceed with
10 affirming the lease sale and letting the lessees, who
11 spent billions of dollars, proceed with exploration. I'm
12 not going to repeat what a lot of other people said about
13 that.

14 I will say that I have a fair amount of
15 experience in public hearings. I did a number of them on
16 oil and gas and a number of issues when I was
17 commissioner. I don't think I have ever been at a public
18 hearing when the environmental NGOs felt there was enough
19 information to make a decision. I think that if the
20 government studied the Chukchi Sea for another 30 years
21 and I was still alive to come back to a hearing at that
22 time, an unlikely event at my age -- if I were to come
23 back, we would still find that there was not enough
24 information to proceed. I think you have enough
25 information.

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1 And one of the things that people need to
2 understand about this, as others have said, this is not
3 only about Alaska's economy. This is about the nation and
4 our nation's oil supply. I would not, for instance, as
5 others have done, put any credence in a court decision
6 that says the pipeline is going to last another 47 years.
7 It can last that long if there is more oil supply, but
8 right now, over the last several years, as several have
9 said, the decline has been six to seven percent a year.
10 We are at 600,000 barrels a day or a little more. You can
11 do the math, and it doesn't get you to 47 years.

12 So we need other supplies. Even if this lease
13 sale is affirmed and the lessees are allowed to begin
14 exploration next year, we are a decade or more off before
15 any oil will get into the pipeline or supply America's
16 energy needs that the country really, really has to have.

17 We right now are in a position where we are
18 beholden to others, others in countries that don't share
19 our values and don't share our interests. We need to
20 develop the national energy supplies for that reason and
21 because we need to improve the economy.

22 Thank you very much.

23 MR. JEFFERY LOMAN: Thank you.

24 MS. KATE WILLIAMS: My name is Kate
25 Williams, and I'm the Regulatory Affairs Representative

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1 for the Alaska Oil and Gas Association. AOGA is a
2 private, nonprofit trade association whose member
3 companies account for the majority of oil and gas
4 exploration, development, production, transportation,
5 refining, and marketing activities in Alaska. We
6 appreciate this opportunity to provide comments on the
7 revised draft SEIS for Lease Sale 193.

8 AOGA urges BOEMRE to affirm Lease Sale 193. As
9 directed by the U.S. District Court for Alaska, the SEIS
10 fully addresses deficiencies in the original EIS related
11 to natural gas development and missing information. The
12 SEIS also analyzes the very large oil spill scenario,
13 which is hypothetical, meaning it is not based on any
14 actual exploration plan and does not include the
15 beneficial impacts of cleanup, recovery, and intervention
16 efforts. BOEMRE should make this point clear in the final
17 SEIS.

18 In fact, the likelihood of a large-scale spill
19 event occurring is extremely low. As BOEMRE acknowledges
20 in the SEIS before the Deepwater Horizon incident, during
21 the 38-year period 1971 to 2009, less than 2,000 barrels
22 of oil in total were spilled as a result of well control
23 incidents from OCS drilling operations.

24 Important to remember is that this is a lease
25 sale which authorizes lessees to engage only in ancillary

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1 activities that do not harm the environment. This is not
2 an authorization to drill. Further environmental review,
3 public process, and federal agency approvals are required
4 prior to any exploration, development, or production
5 activities.

6 Lease Sale 193 is one of the most successful oil
7 and gas lease sales in U.S. history, generating 2.7
8 billion in revenues to the federal government for 487
9 leases. However, almost five years later, not a single
10 exploratory well has been drilled and production
11 activities are at least a decade away.

12 The importance of oil and gas development on
13 Alaska's OCS cannot be overstated. This untapped area
14 holds an estimated 27,000,000,000 barrels of oil and
15 132,000,000,000,000 cubic feet of natural gas. By
16 comparison, total production from the North Slope is
17 16,000,000,000 barrels of oil.

18 Development of these resources is necessary for
19 the continued operation of the trans-Alaska Pipeline
20 system, which delivers 14 percent of domestic oil to
21 refineries on the West Coast and has been identified as
22 critical infrastructure for national security. TAPS is
23 currently operating at one-third of its capacity, or
24 640,000 barrels of oil per day, compared to 2,000,000,000
25 barrels a day in 1988, and could be uneconomic to operate

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1 as early as 2020 without additional supply.
2 An annual average of 54,000 new jobs in Alaska
3 and the rest of the U.S. would be created and sustained by
4 OCS-related development for 50 years. This translates
5 into 63,000,000,000 in payroll to employees in Alaska and
6 82,000,000,000 to employees in the Lower 48. Federal,
7 state, and local governments would realize 193,000,000,000
8 in revenues.

9 Clearly, development of Alaska's OCS resources
10 is vital to the nation's energy security and would help
11 turn the tide against the economic recession we're now
12 facing. Once again, AOGA urges BOEMRE to affirm Lease
13 Sale 193. Failure to do so would allow the moratorium on
14 exploration and development of Alaska's OCS to continue,
15 harming the Alaskan U.S. economies and our energy security
16 without any corresponding benefit to the environment.

17 Thank you.

18 MR. JEFFERY LOMAN: Thank you. Dorothy
19 Lazar, Cody Lee, and Lindsey Hajduk. Dorothy, the floor
20 is yours.

21 MS. DOROTHY LAZAR: Yeah. I'm Dorothy
22 Lazar, D-O-R-O-T-H-Y L-A-Z-A-R, and I'm a citizen, and my
23 concern is that -- and I appreciate the opportunity to
24 speak as a citizen because I've lived in Anchorage since
25 1986, but I had the opportunity to live in Africa for a

1 couple of years at a company where they were just starting
2 to develop oil, and I saw the abuses, environmental and to
3 the people there.

4 And I'm happy to live in a country where at
5 least we can get up and tell what our concern is to a
6 regulatory agency which I hope has some teeth, because my
7 concern is that we always talk ahead of time about how
8 it's going to be good, how we are going to get the water
9 back to where it was, and we're going to get the
10 mountaintop back to where it was and the ocean is going to
11 be taken care of and the mammals, and they aren't. And
12 afterwards we are appalled.

13 And so I'm here just to say, well, at least I
14 came and I told you my concern, which is that it's
15 apparent to me by listening -- and I listened to
16 everybody, and it's apparent that the people who had the
17 most information were a couple of people who were
18 scientists, and they gave specifics about information that
19 the regulatory agency has not taken into consideration yet
20 with this process. And so that needs to be addressed.

21 The oil is going to be there in a year. It's
22 going to be there in ten years. But we cannot ignore what
23 we have learned historically, which is there will be a
24 large oil spill, we will be appalled by it, and we will
25 say, why wasn't there something in place.

1 So just to say what the bottom line would be for
2 me is it would be unconscionable to go forward at this
3 point until such a time that all this other information,
4 scientific and environmental, with data gaps, as one
5 mentioned, these mechanisms are in place and fully
6 functional. The oil will be there.

7 Thank you.

8 MR. JEFFERY LOMAN: Thank you, Dorothy.
9 Cody Lee.

10 MR. CODY LEE: Hi. My name is Cody Lee,
11 C-O-D-Y L-E-E. And I've lived in Anchorage since 1981. I
12 am not directly a part of the oil business. I am a small
13 business owner. I own a small residential remodeling
14 company. And I've benefited greatly from the economics of
15 the oil companies and the development of Alaska. But I
16 lived here in the mid '80s when I have seen the lack of
17 development on the Slope and what it did to our economy
18 and the families in our communities and the people moving
19 out. It's not a pretty sight.

20 We are a resource-based economy. And oil
21 companies have been developing oil safely in Alaska for
22 quite some time. It seems a lot of the lawsuits are filed
23 not in good faith, but just a way to do more studies, to
24 create jobs for a few scientists and environmentalists,
25 not to protect the environment. Alaskans need jobs. Our

1 country needs the oil. I support development, and the
2 past speaks for itself. Oil has been developed safely.

3 Thank you very much.

4 MR. JEFFERY LOMAN: Lindsey H-A-J-D-U-K.
5 Lindsey. Jeff Jones. Let me see the hands. Jeff Jones?
6 Last shot for Jeff Jones. Lucy Jean? Last shot for Lucy
7 Jean. Ryan Schryver. You can have the very last word.

8 DR. JIM KENDALL: And then we may take a
9 short break to see if anybody else wanted to chime in. So
10 you have the last word before the break.

11 MS. LINDSEY HAJDUK: My name is Lindsey
12 Hajduk, L-I-N-D-S-E-Y H-A-J-D-U-K. I'm a field organizer
13 with the Sierra Club in Anchorage. The Sierra Club is a
14 national grassroots organization, and we have 1,500
15 members in Alaska. I want to start by thanking BOEMRE for
16 the opportunity to weigh in to this revised draft
17 supplemental EIS for the Chukchi Sea Lease Sale 193. I
18 appreciate the changes BOEMRE made in the hearing formats
19 on the North Slope, in addition to the Fairbanks hearing
20 and the changes at this hearing.

21 I want to just kind of emphasize who I work for.
22 And that is for a lot of residents in Alaska. This is
23 just an event that we had on Saturday with over 80 people
24 saying they don't want offshore drilling, and I'll give
25 you more information on that. And we did collect

1 comments. We are working hard to get more comments for
2 BOEMRE.

3 In this revised draft SEIS, the Sierra Club once
4 again feels two main issues are not addressed regarding
5 missing data and unanswered questions about the Chukchi
6 Sea, as well as the effects oil development will have on
7 the ecosystem, including impacts from natural gas
8 development. Site specific information regarding a very
9 large oil spill must also be incorporated in the SEIS in
10 order to move forward. Because these issues are not
11 adequately addressed, the lease sale should not move
12 forward.

13 This revised draft SEIS does nothing to remedy
14 the flaws in the agency's initial analysis of missing
15 information. The President's Commission on the Deepwater
16 Horizon oil disaster seconds the call to fill these gaps
17 and encourages BOEMRE to work with the U.S. Geological
18 Survey and the National Marine Fisheries Service. The
19 USGS recently published a report, and the information --
20 and the important missing information identified in this
21 report must be incorporated into the SEIS before
22 development decisions are made. This report makes it
23 clear that drilling in the Arctic Outer Continental Shelf
24 is risky, so we need to proceed without -- so if we
25 proceed without taking the time to make thoughtful

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1 decisions, we risk another Deepwater Horizon disaster in
2 the Arctic.

3 In addition, the National Marine Fisheries
4 Service has told BOEMRE to obtain more information about
5 the effects of oil and gas activities on fish before
6 proceeding, and the same can be said about marine mammals.
7 BOEMRE has acknowledged it does not know if seismic
8 testing will affect fish at the population level because
9 scientific information is inadequate. However, at the
10 same time, it concludes that available information shows
11 that there is no significant effects on fish. This type
12 of double speak is not acceptable, particularly in the
13 wake of the Deepwater Horizon disaster. BOEMRE owes it to
14 the public to do better in this revised draft.

15 It is good that BOEMRE is looking at scenarios
16 about a very large oil spill in the Arctic, which is
17 something over 150,000 barrels of oil. But there is a
18 chance, a 27 to 54 percent chance, of a big oil spill
19 occurring. It's not a low probability. BOEMRE also
20 acknowledges that this will have a catastrophic effect on
21 the region's wildlife and, therefore, communities. This
22 analysis actually finds that over 2,000,000 barrels of oil
23 can spill in just 74 days in the Arctic.

24 It took almost five months to stop the Deepwater
25 Horizon disaster from spewing oil, and that was in the

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1 Gulf of Mexico where weather is hardly an issue, thousands
2 of people are there to help cleanup efforts. Those are
3 luxuries we don't have in the Arctic. If you think the
4 pipeline right now functioning at a level that is fine is
5 really scary, we have to re-evaluate what we think is
6 actually going to happen up there.

7 That said, this analysis is an approach in
8 assessing a spill in the Arctic in general, but there must
9 also be a site specific environmental analysis for Shell's
10 proposed drilling plans for 2012, including a potential
11 blowout oil spill.

12 The Sierra Club will submit more complete
13 comments, but this outlines the reasons why we think a
14 decision should not move forward. Until, and if, this
15 information can be adequately addressed, we cannot put the
16 Arctic at risk from aggressive offshore drilling plans.
17 We have a lot of people to stand behind this.

18 Thank you.

19 MR. JEFFERY LOMAN: Thank you, Lindsey.
20 So everybody didn't agree with each other tonight, but I'd
21 like everybody to stand and jointly agree with each other
22 to welcome our guests from China in the back of the room.
23 They came here tonight and spent the entire evening
24 listening to us and watching our process here in America.
25 Welcome to America. Welcome to Alaska. And

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1 thank you for coming to watch our process.

2 So we are going to take a break. And then -- we
3 are going to take a ten-minute break and we are going to
4 come back for anybody that has, as a result of the break
5 or otherwise, something to say at the very bitter end.

6 (A break was taken.)

7 DR. JIM KENDALL: Okay. Ladies and
8 gentlemen, we are going to wrap this up with anyone else
9 that wants to provide some comments. Please, let's keep
10 them three to five minutes if you choose to speak, and
11 let's focus at the Lease Sale 193 revised draft EIS. We
12 really need to kind of focus on that. And who would like
13 to be next? We need your name and -- the floor is yours.
14 Please state your name for the reporter.

15 MR. ERIK THEDE: Good evening. My name is
16 Erik Thede, E-R-I-K T-H-E-D-E. I'm retired. I used to
17 work for Unocal in Kenai at the fertilizer plant. I
18 started up the one -- it was built in '76, '77, the one
19 that's now being exported over to, I think, Nigeria. So
20 we will be getting no fertilizer to grow our plants from
21 food from Nigeria. The reason it's going there is because
22 we have no more gas. We have no more feedstock here. The
23 reason is because we have difficulty in drilling and
24 getting permits and so on, so forth.

25 In 1976 when I was running one of the plants,

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1 starting up a second one, we were exporting fertilizer to
2 China, to India, to Mexico, to the entire West Coast of
3 the United States, to England. We were shipping ammonia
4 around the world. In the late 1990s, early 2000s, China,
5 instead of taking fertilizer, was exporting engineers,
6 exporting technology. They said that they could turn our
7 coal into gas that would make fertilizer. It did not
8 happen, so the fertilizer is gone. The same general kind
9 of difficulty in permitting and getting industry and
10 growth is occurring here.

11 Shell has spent something like 3.5 maybe
12 \$4,000,000,000 in the Chukchi Sea, and has gotten
13 absolutely nothing except reports. Meanwhile, China --
14 you have seen some of the guests. They are students that
15 are in college. China has spent 1.3 billion and bought
16 one-third of the oil fields in Uganda. 3.5 versus 1.3.
17 Nothing, no result, versus one-third of a very productive
18 oil field.

19 We as a nation are competing. And while we are
20 looking for more data -- as Mr. Shively says, he's never
21 seen testimony where the NGOs said there was enough there.
22 We are looking for more data, more data, more data, while
23 our competitors are producing, surviving, growing, and
24 getting in the position to feed us, to lend us money, to
25 give us fuel. This is a very, very dangerous position.

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1 I strongly support the oil industry, not because
2 they are perfect, but because they are our future.

3 Final comment -- final two comments. Russia
4 owns the shoreline, about one-third of the -- one-half of
5 the Arctic Ocean. They have stated -- and this was in
6 National Geographic a few years ago. They have stated
7 that a central part of their national oil energy policy is
8 to develop the offshore oil, gas, in the Arctic Ocean.

9 If we don't and we don't have the technology and
10 we don't have the experience, they are going to do it.
11 And when they have an oil spill, they are going to say,
12 oh, well. And we won't even be able to help them.

13 So I think that's another reason for pursuing
14 this. We will get experience. We are well regulated. We
15 are doing our best to make this a safe project.

16 Final comment. My wife is sitting in the
17 audience. 1976, she and her family, in other words, her
18 siblings, ten people made 200 Renminbi for the entire
19 year. Two hundred, that's maybe \$10 the entire year.
20 They had a very small carbon footprint. They had water
21 buffalo that plowed the field. She had a water buffalo
22 she would hit to pump the water. They didn't have oil.
23 They didn't have gas. That's how they lived. This year
24 she is making maybe 100-, \$200,000 a year in real estate
25 appreciation in China. They have gone from maybe her

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1 share was \$1 to 1-, \$200,000 in 30 years.

2 I was starting up a chemical plant. I was busy
3 exporting, making money for the state, making money for
4 the United States. We have gone from very poor people
5 to -- versus we were rich. The total opposite. If we
6 continue this way, we will be a Third World country not in
7 30 years, maybe ten years, maybe 20. I don't know. This
8 is our survival. We have to do something. And there is
9 nothing that's totally guaranteed. Like our companies
10 [indiscernible], they are going to do everything humanly
11 possible to prevent disaster.

12 The alternative is turn off the lights. In
13 China today, no heat, no air-conditioning, so in the
14 winter we are sitting here in coats at 30 degrees. If we
15 want that, if we want to grow food and water buffalo, have
16 at it. But this -- this is in graphic terms, this is the
17 alternative we are facing. Continue declining and going
18 backwards or stop it. This is our chance to stop it.
19 It's difficult to turn around. We have to do it. There
20 is no choice. That's my comment.

21 DR. JIM KENDALL: Thank you.

22 MR. PAUL KENDALL: I guess I'm the last
23 person. My name is Paul D. Kendall, for the record,
24 again. I wanted to thank you, Mr. Kendall, for asking for
25 a summary. What I wanted was to reflect here very

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1 quickly.

2 There was a Ms. Heiman here earlier, and that
3 Ms. Heiman suggested that these were very difficult
4 circumstances before. And Mr. Lohan [ph] here is a -- a
5 strong, stern presence, I assure you. And you always have
6 to watch those large animals with a great deal of detail.
7 But setting that aside, Mr. Lohan, the other meetings were
8 very, very difficult, crammed in, just crammed in; hot,
9 irritable. It was very difficult. It was very -- even
10 here, this is not as well organized as I would like, but
11 this is much, much better. Thank you so much.

12 Your bowl didn't work out for me, and I was
13 going to assess it because you were pulling the cards out,
14 but I'll pass this moment up, but I would suggest that
15 next time -- I'm taking a couple slings here, but this is
16 a tough guy up here. Okay. Don't you think he's not.
17 Now, look. I'd suggest you put those people for one in
18 pile and the others in the other and then just draw back
19 and forth, and then a question from the audience. That
20 way you will get a good spread, for what that's worth.

21 The lady -- there were so many moments here to
22 have a discussion with people who had credible content.
23 Mr. Kip Knudson, he's with Tesoro. When I sent out the
24 letter making inquires of how many barrels of oil
25 Anchorage -- let me explain, this is part of the problem

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1 we have in our society. Not you. Don't take it
2 personally.
3 We are having complex problems that are
4 connected. And that connection is becoming more complex
5 to find resolution. And yet, many of our leaders have
6 fallen back to old mindsets of control, control, control.
7 This is the time when you have to open your people up and
8 give them unhurried moments on camera, on recording, so
9 that the greater body can see this. But when you gather
10 men together and you try to herd them through comments of
11 desperation or fear, which we call pounding the message,
12 you end up with chaos, and it's just a matter of time
13 before it blows back on you.

14 This lady here, the reason she can't hear me is
15 because you don't have a camera running. You didn't prep
16 ahead to tell a radio station or a TV station which has a
17 see right in the -- you could have gone to the entire
18 state of Alaska right in here on this circuit board.

19 But because our leaders seem to be divided
20 between the Republicans and Conservatives and the
21 liberals, it's just gone nasty, absolutely nasty. We are
22 no longer able to have dialogue. We are no longer having
23 unhurried dialogue where men can interrogate and probe the
24 content and character of other men. And that's how you
25 make a society work. And these are the most critical of

1 times where we should be doing that.

2 Now, a couple other things I wanted to mention
3 here. Thank you so much. I was going to ask for a round
4 of questions for your public. You would have had a lot
5 more people here, but what's happening is we are being so
6 disconnected, so disconnected -- three minutes, you can't
7 even -- you can't -- you can't build a reasonable platform
8 in three minutes, let alone a complex platform. So what
9 happens is the public is just breaking away because they
10 cannot sustain the -- the loss of dignity and self-esteem
11 in trying to communicate in those moments.

12 So when you set a round again, I thank you. It
13 was a wonderful moment and I heard you propose it to
14 Mr. Lohan. I saw him swing with it. So anyway, coming
15 back here, for example, Mr. Knudson where I asked for the
16 barrels of oil, the reason I did that is 50 of our cities
17 are now preparing to do charging stations for electrical
18 vehicles. Forty of the world's international cities are
19 now preparing charging stations. China is spending
20 \$10,000,000,000 a month on beyond combustion energy. And
21 in order for you to understand where your community has to
22 go, you have to understand your foundational fuel feed
23 stocks, which are oil. That oil is what we call a
24 foundational feedstock. But when you try to find that
25 out, they all tell you, oh, we can't tell you.

1 Mr. Knudson, bless his heart, he's a good man. He's a
2 good man, and he called me right up and told me that he
3 was bound by federal law that he couldn't give me the
4 answers.

5 What the hell is that? And then he wouldn't
6 e-mail me, so I have no record. But he was a good man,
7 but we should have been able to query him because in order
8 for us to understand where we have to go, we have to
9 understand that by some formula that we can refer to
10 outside of individuals with personal drives and conflicts
11 of interest.

12 In closing, for example, there was another thing
13 here, they keep talking about Shell Oil. Have you heard
14 of the Rice Krispie Rocks up on the Slope? I call them
15 Rice Krispie. The source rocks. Big bear, somebody, or
16 Big Bird is claiming they can come in now and there is
17 trillions of barrels of oil in what they call source
18 rocks. I call them Rice Krispies. There are discussions
19 going on in this state that do not make sense. They
20 appear to have some insect colony hive like design where
21 the chamber -- as long as the chamber can pound the
22 message next to the general populace and drone them out,
23 they move past any reasonable discussion. And a sign of
24 that is terms like skinning the game, stakeholders,
25 infrastructure.

1 When they say skinning the game to me, I tell
2 them, you must be talking about circumcision, or a triple
3 x-rated individual. Oh, no, Mr. Kendall, we are talking
4 about investors. And I tell them, why don't you say
5 investors? And here is why they don't, Mr. Kendall. The
6 reason they don't is when you talk like that as a
7 reasonable person, I can make inquiries, who are the
8 investors, how much do they want to invest, what's their
9 intention, what's their rate of return? What happens is
10 you can begin to discover.

11 But those people who do not have the
12 intellectual capacity or are corrupted in some way or not
13 well intended, they use these sling terms so you can use
14 of move past, like skinning the game, stakeholders,
15 shareholders. Not shareholders, but things like that.
16 I'm very concerned I'm seeing that now develop across the
17 board here.

18 In closing, Mr. Kendall, you are in a very, very
19 special place. We have a chance, rather than having the
20 G8 or the G20 tell us how they are going to reconstruct
21 revenues -- we are in a precipice, a bore tide. If we
22 don't figure this out, I think we are going to see chaos
23 unlike we've seen before. Why would we let the G8 or the
24 G20 redesign and reconstruct new revenues, when here in
25 Alaska we could do that ourselves. And all we need is

1 people like yourselves and are the people who have
2 conveyed tremendous hope and faith and trust in which is
3 what you folks have earned. We now need you to be able to
4 put structures in place, like a 30-day plenary on camera
5 unhurried that so I can challenge these people and we can
6 challenge each other. And I hope that makes sense to you.

7 One more thing, if I might, like this said other
8 gentleman -- it's only you guys. Let me take you a little
9 place unusual. Our children are going to understand
10 energy like we have never understood it before. You do
11 not drink water. You drink hydrogen. The word water is a
12 tricked-up term.

13 It is an ancient, archaic, disconnecting term.
14 When you drink water, that's hydrogen. Your body makes
15 electricity, and that's where you get your synaptic
16 impulse. That synaptic impulse is your state of being.
17 You are a hydrogen fueled transportation system. Every
18 creature you can fathom in the universe, whether it's
19 microscope -- not the universe. That's a little bit of a
20 reach. Every creature that we are aware of, whether it's
21 microscopic or bacteria, is a transportation system, a
22 specialized design. All of those creatures are fueled by
23 living in harmony with the hydrogen, which allows them to
24 consume and make electricity, which allows them to fuel
25 their transportation system.

1 There is no such thing as gasoline. It is a
2 sling term. Gasoline is hydrogen popping carbon. You try
3 to pull a log out of a burnt fireplace that's black and
4 try to light that up, it's 5- to 7,000 degrees. Carbon
5 doesn't do anything. Hydrogen is the work horse. The
6 ocean is a complex hydrogen compounded body, almost
7 another dimension. The known universe is 99.88 percent
8 hydrogen. The sun is 96 percent hydrogen. Diesel is
9 hydrogen with more carbon crammed into it. Natural gas.
10 These are tricked-up terms, sling terms. There is no such
11 thing as natural gas. When you make that connection, that
12 child is about to understand that he is related to
13 everything around him. Everything you see is a
14 manifestation of energy attempting to find a state of
15 construct or a state of being.

16 And so what I'm trying to show you is it is my
17 position -- I've looked at energy for many, many years and
18 I have been many places. It appears to me our children
19 are about to understand energy like we have never seen it
20 before. It is just staggering. And by the way, I don't
21 want to get too esoteric on you here, but I consider
22 hydrogen to be a female fuel because it not only breaches
23 life, it sustains life. And when you burn it, it's a full
24 circle.

25 It booms, and then it comes to be a consumable,

1 which we call, as an agent, people water. The male
2 energies appeared to be magnetic fields and frequencies,
3 which we call, as an agent people, water. The male
4 energies appear to be magnetic fields and frequencies, and
5 we are some serious players, but we are still a big
6 mystery. Nothing is held together without us without
7 proper magnetic fields and frequencies. We are some
8 serious players, but we are still a big mystery. Nothing
9 is held together without us without a proper magnetic
10 field or frequency.

11 Our children are about to understand that. And
12 in doing that, it appears to me -- and I have a site and I
13 have plenty of statements in writing; everybody knows
14 that. I'm now proposing that each of us should have an
15 annual allotment of clean electricity per person per
16 dwelling at no charge.

17 Now, energy is what we call a spherical subject.
18 It is thick. It is heavy. It is complex. And most
19 people can't handle that. But once you understand how
20 important energy is as a foundation to you and your
21 family, you will realize that all economies are
22 aftermarkets of the energy from that individual family.
23 All of these economies, all of these free enterprises are
24 conveyances of opportunity from us living in harmony.

1 being, which is maintained by hydrogen; your individual
2 free will; without that, you are a drone or a slave or a
3 subject. And the third is clean in harmony energy,
4 electricity for your property and dwelling, which belongs
5 to us in an allotment. And I have a form and a model for
6 that. And it appears to me after all these years it is
7 the only way for us to bring stability. And I do not see
8 how the rest of the world to watch people like yourselves
9 who are career people and I think well intended to see
10 them have foolish discussions about the stock market and
11 not talk about energy, we can no longer sustain using
12 energy as a means to be able to bring value to the dollar
13 it's all falling down.

14 The new economies are in replacing the carbon
15 and the new technologies. But in doing that, we are going
16 to have to look at energy, and Alaska, with your
17 residential sector here, the Cook Inlet, the Knik Arm, and
18 the oil companies and the Natives and the vast resources,
19 we have a chance -- the chance of a millennium to lead the
20 rest of the world, and for everybody to have everything.

21 And you have accommodated me. I've abused the
22 privilege you have extended to me. Mr. Lohan can make an
23 issue later, but Mr. Kendall, thank you so much.

24 DR. JIM KENDALL: You are welcome.

25 MR. PAUL KENDALL: I'm so excited with

1 this little moment, and there would be more people show
2 up, but we go to a City Council meeting and it's three
3 minutes. You just embarrassed yourself. And they turn
4 your head to the crowd to the back so you all can't see
5 your public. All your meetings should be to the left side
6 so the public can see the faces of your -- it's very
7 important that we gauge the content and the character of
8 those people speaking. But when you disempower your
9 people, you power them down, which is not uncommon in past
10 histories. They no longer show up, and that is the
11 beginning of the demise of your society.

12 And so I thank you for this moment here. For me
13 it was a wonderful moment. Again, now I'm feeling guilty
14 for talking so long. And Mr. Lohan, I still love you, for
15 what it's worth. This is a tough guy.

16 MR. JEFFERY LOMAN: Have a good one.

17 Thank you very much.

18 (Proceedings adjourned at 10:22 p.m.)
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1 REPORTER'S CERTIFICATE

2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:

4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.

12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.
15

16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska

20 My Commission Expires: November 5, 2012
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PUBLIC HEARING
FOR
REVISED DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT STATEMENT

CHUKCHI SEA

BUREAU OF OCEAN ENERGY MANAGEMENT
REGULATION AND ENFORCEMENT

Wainwright, Alaska

Taken June 30, 2011
Commencing at 7:15 p.m.

Volume I - Pages 1 - 53, inclusive

Taken at
R. James Community Center
Wainwright, Alaska

Reported by:
Mary A. Vavrik, RMR

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A-P-P-E-A-R-A-N-C-E-S

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Taken by: Mary A. Vavrik, RMR

BE IT KNOWN that the aforementioned proceedings were taken
at the time and place duly noted on the title page, before
Mary A. Vavrik, Registered Merit Reporter and Notary
Public within and for the State of Alaska.

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P-R-O-C-E-E-D-I-N-G-S

MS. SHARON WARREN: Okay. We will get
started here, but before we start and make introductions
and I let you know who we are and why we are here,
Marjorie is going to give us your blessing. Thank you,
Marjorie.

(Blessing offered by Marjorie Angashuk.)

MS. SHARON WARREN: Thank you for coming
tonight, and thank you for allowing us to come into your
community to be able to have this public hearing on the
Revised Draft Supplemental Environmental Impact Statement
for the Chukchi Sea Sale 193. Just want to introduce
myself and who we are and who is here tonight to listen to
your comments on this document.

My name is Sharon Warren. I'm the Program
Analysis Officer for the Bureau of Ocean Energy
Management, Regulation and Enforcement. We are a federal
agency under the Department of the Interior. I am also
the project manager for this supplemental EIS.

Tonight we have here from our office, we have
Mike Routhier. He's our environmental impact statement
coordinator; Michael Haller who is our community liaison;
Scott Blackburn, who is the technical writer and editor
for this document; Rance Wall, he's our regional
supervisor for resource evaluation. Mary Vavrik is our

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court reporter, and she's going to be taking all the
comments tonight. She will be transcribing them and
taking them so we will have a record of this meeting and
of your concerns. And Earl Kingik has offered or we asked
if there needs an interpreter. Earl said he would be able
to interpret it for us if there needs to be one.

So anyway, we are going to conduct this meeting
a little different than maybe we have come out here before
to conduct meetings on public hearings. We are going to
give you a short presentation of why we are here and go
through the information that we have. And then we will
ask the Elders, if there is any Elders in the group, to
speak, any elected officials to speak.

And then what we will do is we will be passing
the mike around, and then each of you can either say your
comments on the document; if you don't want to speak, you
can pass the mike to the next person. And we will
continue to do this throughout the night until all of you
have had a chance to comment and say what you wanted to
say on this document.

So we are not the decisionmaker. We are here --
the Secretary of the Interior is the person who will be
making the decision concerning this lease sale, and what
we are doing now is to get the information from the
communities. We have already gone to Kotzebue, Point

1 Hope, Point Lay, Fairbanks, Anchorage, and now we are
2 in -- and Barrow. We went to Barrow, and now we are in
3 Wainwright.

4 So anyway, so with that I'm going to turn the
5 mike over to Mike, and he's going to go through the
6 presentation that we have for you this evening.

7 MR. MICHAEL ROUTHIER: Thanks, Sharon.
8 Okay. As Sharon explained, we're here to talk about a
9 document that we brought here tonight. It's a Revised
10 Draft Supplemental Environmental Impact Statement, or EIS,
11 for Chukchi Sea OCS Lease Sale 193. And I'd just like to
12 give you a little background information on that.

13 What was Lease Sale 193? Well, in 2007, BOEMRE,
14 our agency, prepared an environmental impact statement, an
15 EIS, on a proposed lease sale for submerged lands out in
16 the OCS in the Chukchi Sea. And in 2008, the agency held
17 a lease sale. Six companies bid on the rights to explore
18 tracts of the OCS. We offered about 30,000,000 acres. A
19 little under 3,000,000 acres were actually leased.

20 However, days before --

21 MR. LES SEGEVAN: I just heard you say
22 3,000,000 acres. What was that? I didn't get what you
23 said about the 3,000,000 acres.

24 MR. MICHAEL ROUTHIER: Okay. So in the
25 lease sale that was held in 2008, a few companies were

1 bidding for leases out in the OCS, out in the ocean.

2 MR. LES SEGEVAN: Is that right in front
3 here?

4 MR. MICHAEL ROUTHIER: It's a ways off.
5 There actually -- you can see on some of the maps in the
6 back where the leases are.

7 MR. LES SEGEVAN: Those colored ones?

8 MR. MICHAEL ROUTHIER: Yes, yes. All
9 three of those maps show the leases. All the leases in
10 the Chukchi Sea were all from this lease sale right here
11 that we're talking about.

12 MS. MARJORIE ANGASHUK: I was going to ask
13 you, what is 193? What is 193?

14 MR. MICHAEL ROUTHIER: The question was,
15 what was 193. And that was just the name of the lease
16 sale. They called it Lease Sale 193, and that's how all
17 this stuff happened, through that lease sale, the name of
18 the sale.

19 A few days before the sale was held, a group of
20 plaintiffs sued the bureau trying to invalidate the lease
21 sale. They said that the environmental impact statement
22 the agency prepared, they didn't adequately address the
23 environmental impacts of what could happen if they were to
24 offer the lease sale. It stayed in the courts for a
25 little while.

1 Then last summer, July 2010, the Federal Court
2 down in Anchorage ruled that while most of the EIS was
3 satisfactory, there were three issues where the Court had
4 concerns, and he remanded it back to the agency. He
5 basically said you didn't do these three things well
6 enough. You have got to do some more work.

7 The first of those three issues said that the
8 agency didn't do a good enough job analyzing the potential
9 effects if there were to be natural gas development in the
10 Chukchi Sea. That Lease Sale 193 included certain
11 incentives for companies who bought leases to develop
12 natural gas, but the EIS that the agency did didn't really
13 analyze well enough the potential consequences of what
14 were to happen if these companies analyzed -- I'm sorry --
15 produced gas. So the judge said you have got to analyze
16 natural gas production.

17 The second issue --

18 MR. LES SEGEVAN: That's only natural gas,
19 not oil?

20 MR. MICHAEL ROUTHIER: Yeah, that's --
21 this is one of the issues that the judge said the agency
22 didn't do a good enough job on. One of those issues was
23 the analysis of natural gas development.

24 The other two issues are related. Basically,
25 when a federal agency produces an EIS, there are certain

1 procedures and protocols they are supposed to follow. One
2 of those procedures is 40 CFR, Section 1502.22. And
3 basically that section of the federal regulations tells
4 the agencies what to do where there is data gaps or
5 missing or incomplete information.

6 The judge agreed with the plaintiffs. He found
7 that the agency didn't follow the procedures in the
8 correct way. So the second and third issues is basically
9 the judge telling the agency you need to go back and
10 follow those procedures.

11 So what did BOEMRE, what did the agency do in
12 response to the court order? The agency prepared more
13 environmental analysis and then produced a supplemental
14 environmental impact statement; in other words, another
15 EIS to supplement the one that it did in 2007, with the
16 thought that the two documents combined would fully
17 address the issues. It was a draft. It was called a
18 draft SEIS.

19 And part of publishing the draft EIS means that
20 you have a comment period. So you put the document out
21 for public comment. And we came out to the villages. We
22 came to Kotzebue, Point Hope, Point Lay, here in
23 Wainwright, Barrow, and then also in Anchorage, and we
24 heard testimony. We got public comments, and we held a
25 series of government-to-government meetings with the

1 tribal governments from each village. Again, that was in
2 November of last year, so some of you might have -- I
3 think were at that meeting.

4 Next question, was a draft SEIS finalized after
5 that, and the answer is actually no. We received over
6 150,000 comments on that draft SEIS, which is a huge
7 number. And many of those comments brought up a recurring
8 theme, which was, in light of the Deepwater Horizon event
9 that occurred down in the Gulf of Mexico, you as an agency
10 need to analyze the environmental effects of a really
11 large oil spill. In other words, what if something
12 catastrophic were to occur in the Chukchi. You need to
13 explain to the decisionmaker what could happen in that
14 event.

15 So we as an agency considered those comments and
16 we said, you know what? Yes, that's something the
17 decisionmaker should know about, and we are going to do an
18 analysis of a very large oil spill.

19 So we got a scenario from our geologists in
20 Rance's department. We passed on that scenario to our
21 wildlife biologists and our air quality experts and our
22 oceanographers, all our scientists who know about the
23 environmental effects, and we produced a very large oil
24 spill analysis. Then we combined that with a draft EIS we
25 had talked about in November, and we published it

1 together, and that's what this document is. It's the same
2 document we had in November, plus the very large oil spill
3 analysis. Plus we made some other changes in response to
4 comments that we heard in November.

5 UNIDENTIFIED SPEAKER: There are some
6 people -- do you have -- in the case of a spill, do you
7 have the equipment and all that to clean it up real fast,
8 or is it going to be like the Gulf, you know, and slowly,
9 methodically cleaning it up or something like that?

10 MR. MICHAEL ROUTHIER: The question was
11 whether we would have sufficient equipment to clean up a
12 large oil spill in the Chukchi Sea or whether it would be
13 something akin to what happened in the Gulf. This
14 analysis that we did, we talked about all the types of
15 response techniques that are available. However, we don't
16 have any specific exploration plans. There are no plans
17 to drill out in the Chukchi right now, so that will be
18 evaluated if and when we look at a specific plan. So the
19 short answer, I guess, is, no, there is no specific plan,
20 but that's because we are not formally considering any
21 specific proposal to drill. We are still at the lease
22 sale phase.

23 Only after getting through the lease sale phase,
24 if the Secretary affirms some or all the leases, and if
25 the Court agrees that we did a good job on the EIS, and

1 then if the companies submit an exploration plan, then we
2 as an agency would start looking to see whether their
3 response was adequate, but we are a few steps away from
4 that right now.

5 MR. LES SEGEVAN: Would you be prepared to
6 clean up whatever goes down to the bottom of the ocean
7 where the microorganisms are in case there was a spill?
8 Like if there was ice on top of the water, would you be --
9 your company be prepared to go in there as fast as they
10 can in cleaning up?

11 MR. MICHAEL ROUTHIER: Again, that's
12 something we look at in this document. We look at the
13 effects. We understand that some of the spilled oil would
14 probably go down into the water column into the benthic
15 areas, but again, we don't have a -- we are not evaluating
16 any specific plans yet. So there are -- there is no plan
17 to drill, so there is not any response plans either. But
18 if we got to that stage, then, yes, the agency would look
19 at whether what the oil company was proposing would be
20 sufficient to do that.

21 MR. LES SEGEVAN: They will need to do
22 that.

23 MR. MICHAEL ROUTHIER: Yeah, we agree
24 that's something as an agency we would be looking at. As
25 Sharon said, we are a regulatory agency. We are in charge

1 of enforcing certain laws. One of the regulations that we
2 enforce requires the oil companies to have an adequate
3 plan to respond to an accident. So that's certainly
4 something that we would be looking at if we receive an
5 exploration plan.

6 MR. LES SEGEVAN: Like if there was -- we
7 had an okay and you drill for gas, you would need to be
8 prepared to get in there as fast as possible, you know,
9 because we got them currents out there and it's moving all
10 the time. Not --

11 MR. MICHAEL ROUTHIER: Yes. If there were
12 any development, including gas development, there would
13 need to be plans and resources to get out there quickly.
14 We agree that's something the agency would make sure is
15 within any specific plan that might come in down the road
16 in a few years or whenever.

17 So we are here today to talk about --

18 MR. ENOCH OKTOLLIK: (Inupiaq.) If you
19 should find the recovery of oil and, you know, reading in
20 magazines and whatnot, there are different weights of oil,
21 right? There is real thick spot crude oil, and there
22 might be light -- light crude oil. I don't know what kind
23 of oil you are going to find out there. And if it's going
24 to be recoverable, if it's heavy spot crude oil, what do
25 you expect to find out there if you are going to go into

1 production? What are you looking at? What kind of oil
2 are you looking at?

3 MR. MICHAEL ROUTHIER: Well, the scenario
4 that we analyze, the very large oil spill scenario,
5 analyzes a specific type of oil. It's a lightweight
6 crude. That might differ in different areas of the lease
7 sale area. There might be some heavier crudes in some
8 areas, but again, we don't know exactly what the companies
9 are even going to propose to do, you know, so we look at
10 each specific plan. But we are not there yet. We are
11 still at the lease sale stage.

12 And so we are not looking formally at any plans
13 to actually drill anything right now. So we are not
14 looking at any specific plans to drill right now. There
15 is a few other things that would need to happen before we
16 might get to that stage. So we are just here tonight to
17 record the public comments that we get from you folks, and
18 we are going to consider them when we prepare the final
19 SEIS. In other words, we are going to take your comments
20 and try to make our document better before we finalize it.

21 I mentioned a couple times the term very large
22 oil spill, so I just want to provide a few more details on
23 what we mean when we say very large oil spill or VLOS.
24 Basically we analyze a hypothetical scenario. It's a very
25 serious matter, so if we want to make sure that the

1 decisionmaker understood the gravity of such an event,
2 even if it's hypothetical, even if it's low probability.

3 So we analyze basically the largest -- or the
4 highest flow rate we thought basically possible that could
5 give us a very large hypothetical spill and we think that
6 really reinforces the kinds of environmental effects that
7 could occur if such an event were to happen. We thought
8 it was important that the decisionmaker understood that.

9 Again, the VLOS scenario is purely hypothetical.
10 It's a very extreme case, and it's different than any
11 actual well that the company is proposing to drill. We
12 are not evaluating a specific drilling proposal here.

13 The VLOS is also different from another term you
14 might hear, which is a worst-case discharge. You might
15 hear that in the news or you might hear companies talking
16 about that, and we want to give you a little information
17 as far as what that was.

18 A worst-case discharge is a calculation
19 specifically required by our regulations, and it's
20 specifically required in each exploration permit. So if
21 down the road a company were to submit an exploration
22 plan, it would have to include a worst-case discharge.
23 But because there would be an actual proposal at that
24 point, there would be a lot more information. Like they
25 could tell us where on the map they were proposing to

1 drill, what type of well, what type of equipment, and so
2 on. So the numbers might be different.

3 The VLOS, the quantity of oil might be different
4 from the worst-case discharge, so it's a subtle
5 difference. But we just wanted to highlight that for you
6 because you might hear both terms thrown around, and it's
7 just important to understand that they are different.

8 And again, the worst-case discharge is -- that's
9 what forms the oil spill response plan. The oil spill
10 response plan, in other words, the measures that the
11 company would take to stop or to clean up an oil spill,
12 that's based on a worst-case discharge, and that's
13 something that our agency would review before any
14 approvals are given.

15 MR. LES SEGEVAN: Out here it's going to
16 be worst-case discharge.

17 MR. MICHAEL ROUTHIER: Can I get your name
18 for the record, sir?

19 MR. LES SEGEVAN: Because it's a powerful
20 ocean out there. It's got some currents. I agree we need
21 some oil and gas in the future, but it's good you are
22 doing this because you are going to need to respond in
23 case you go exploration out there and something happens.

24 MR. MICHAEL ROUTHIER: Yeah, we agree. We
25 have heard from a lot of the communities --

1 MS. CHELSEA THIBEAULT: Can you repeat
2 what he says?

3 MR. MICHAEL ROUTHIER: I believe --
4 correct me if I'm wrong, but I believe you are saying we
5 have to be careful -- ready for a worst-case discharge.
6 Given the extreme weather and all the conditions out
7 there, things can get bad pretty quickly, so there would
8 need to be something we would be ready for.

9 MR. LES SEGEVAN: Yeah, that's true. We
10 have got a current, and the wind can change, and the ice
11 can move around. It's a powerful environment out there.

12 MR. MICHAEL ROUTHIER: Yeah. We talk
13 about those things in the VLOS scenario and analysis. So
14 actually that would be a great thing to comment on. You
15 know, we talk about some of the winds and the waves and
16 the currents, so people with firsthand and traditional
17 knowledge of these areas want to review what we have done
18 in the document, tell us what we got right, tell us what
19 we got wrong. That would be very helpful as we try to
20 improve the document and go final with it.

21 MR. ENOCH OKTOLLIK: Enoch, for your
22 record. I think you might -- if you go further out there
23 into the -- how many miles is it out there where the
24 popcorns are? That's almost about --

25 UNIDENTIFIED SPEAKER: About 140 miles.

1 MR. ENOCH OKTOLLIK: 140 miles out there
2 you might see some whirl -- water whirls, whirls that
3 might be happening in the areas out there. And I don't
4 know what they consist of. We don't have the equipment,
5 us, to try to get a second opinion from our own selves.
6 We don't have ships. I don't know if anybody in our
7 community go 140 miles out to observe how the ocean reacts
8 out there. And if we had our own opinion out there, we
9 would probably try to understand how our ocean act 140
10 miles offshore.

11 And boy, it's just like you coming to me and
12 trying to find answers. I can't even give you answers for
13 what you are trying to talk about. It's very hard. We
14 need to sit down all together and try to understand --
15 understand what you are doing out there in the ocean. I
16 don't know what I'm getting at, but I'm -- the depth of it
17 and how the 140 miles offshore, how it reacts out there.

18 But I've heard it from Elders that we start
19 seeing different kind of currents from shallow water area,
20 there will be a different current and then further out a
21 little ways there will be another current, and even
22 further out, there will be different currents. And the
23 way they -- the way they go in some currents sometimes,
24 they will just probably come straight down like that and
25 just go straight down into the ocean. But observing in

1 the ice maybe being 10 to 15 miles out there when the
2 currents are going, when you are staying in the packed ice
3 when the current is going, sometimes it will try to pull
4 you under the -- under the ice or some -- some -- some
5 way, you know. I've dropped into -- hunting seals I've
6 dropped into the water where the current was trying to
7 pull me under the -- under the ice.

8 MR. MICHAEL ROUTHIER: Yeah, I think
9 that's important for the decisionmaker to know. It will
10 be important for the agency to know. And that's something
11 that we now have in the record with the court reporter.
12 And we will make sure we consider that in the document.

13 If you want to give more information on that, we
14 are going to tell you how to submit comments. Basically
15 we are going to accept comments by mail, but also by
16 electronically, so you can go to the website. And Scott
17 over here has instructions on how to provide written
18 comments through the website. They are step-by-step
19 instructions. But if there is something that's not clear,
20 Scott is available by telephone. The phone number is on
21 the back of those directions over there, and we are
22 available to walk you through those.

23 MR. ENOCH OKTOLLIK: Can I get a lawyer to
24 help me with technical words that might be there that I
25 won't understand?

1 MR. MICHAEL ROUTHIER: If we are doing our
2 job correctly -- and I think we will -- we don't need a
3 lawyer to communicate. We can take what you say and we
4 will put that in the document.

5 MR. EARL KINGIK: Earl Kingik, for the
6 record. We got a North Slope Borough attorney over there.
7 You guys have any powers, Mayor Itta's worker is over
8 there. What's your name?

9 MS. CHELSEA THIBEAULT: I'm listening.
10 I'm not an attorney. I do work for the North Slope
11 Borough.

12 MR. ENOCH OKTOLLIK: Nice to see them come
13 around to go to the community to try to help us out.
14 First time I ever see you. I'm the mayor of the
15 community, and the first time I ever see you with -- with
16 whatever is happening over here. And you are not even --
17 the borough is not even going to our community and helping
18 us out and let us fill out what's going on with this Lease
19 Sale 193.

20 MS. CHELSEA THIBEAULT: I'm here to listen
21 to what you all have to say to tell the Borough. Today
22 I'm taking notes on everything that you say.

23 MR. ENOCH OKTOLLIK: Your mayor could work
24 with you. You guys work close with the North Slope
25 Borough mayor, and you are not working real close with us

1 as individuals in our community as you work with the North
2 Slope Borough mayor.

3 MR. MICHAEL ROUTHIER: The agency also has
4 a relationship with the North Slope Borough, so we can be
5 sure to say that when you submit your comments, please
6 include the comments from the people out in the villages,
7 as well, because they are very important to us, and
8 everything should be sent on.

9 MR. ENOCH OKTOLLIK: It's important for
10 us, too, that area out there.

11 MR. MICHAEL ROUTHIER: So after we collect
12 all these comments we are going to try to improve the
13 document any way we can, and we are going to publish a
14 final supplemental environmental impact statement that
15 will be done by early September. And we are -- the
16 Secretary of the Interior is the decisionmaker here. He's
17 going to look at our document and some other materials and
18 make a final decision on the lease sale. So he could
19 affirm the leases or he could change the previous lease
20 sale. He could cancel some or all of the leases. That's
21 the decision that he's going to make, and that will happen
22 in early October of this year.

23 MR. ENOCH OKTOLLIK: Before you go on,
24 could I address the person from the North Slope Borough
25 here? It's just a small question. I'm going to ask her a

1 question. The State is right now trying to settle the
2 coastal management plan, and it's been wondering in my
3 head, you know, the North Slope Borough -- I know when
4 Adelaide [ph] went to Alaska Municipal League meeting and
5 brought the first time to get a coastal management plan,
6 what does it mean to us when -- when there is no coastal
7 management plan right now in the North Slope area with
8 this oil -- with what is happening with this environmental
9 impact statement?

10 MS. CHELSEA THIBEAULT: Can I talk to you
11 after they present, aside, and I can give you some contact
12 information of someone that could give you an answer on
13 your questions?

14 MR. ENOCH OKTOLLIK: And it's relevant to
15 what you guys are -- what the federal is doing right now?

16 MR. MICHAEL ROUTHIER: I really shouldn't
17 say. You know, I shouldn't get between talking to your
18 attorney, so maybe if she could just give you her
19 information, if you guys can talk about that on the side,
20 that would be fine. But I don't want to eavesdrop on any
21 attorney talk. So if we could just table that for now.

22 With that, I think that is some background
23 information on what we are here for. And again, I
24 apologize for coming at such a busy time for you folks
25 but, like we said, there is a court order that requires us

1 to be here. We didn't have a lot of flexibility on the
2 season that we are coming in, so --

3 MR. LES SEGEVAN: In plain English, tell
4 us what we are here for for real, just in plain English so
5 everyone can understand.

6 MR. MICHAEL ROUTHIER: Sure. We are here
7 to get comments on this document that we have prepared.

8 MR. LES SEGEVAN: That's the document to
9 explore about 140 miles out of Wainwright, right?

10 MR. MICHAEL ROUTHIER: It's a document to
11 lease areas.

12 MR. LES SEGEVAN: To these areas?

13 MR. MICHAEL ROUTHIER: So it's just a step
14 before any exploration. Any exploration, that phase would
15 come later and wouldn't happen at all if the Secretary
16 cancels the leases.

17 MR. LES SEGEVAN: To lease areas for gas
18 and oil exploration?

19 MR. MICHAEL ROUTHIER: Yes.

20 MR. LES SEGEVAN: Are you guys from
21 Washington, D.C.?

22 MR. MICHAEL ROUTHIER: No. We are all
23 from Alaska. Well, Anchorage, Alaska. And so we are not
24 here to advocate for a certain position or anything like
25 that. We are just here to collect feedback. We want to

1 collect that, package it up, and we are going to submit it
2 to the Secretary of the Interior. In other words, we want
3 to hear your voices and get information from you folks.
4 And we are going to pass that on up to our bosses, the
5 Secretary of the Interior. So that's what we are here
6 for.

7 MR. LES SEGEVAN: They need to be prepared
8 for some heavy-duty gas and oil spill if they going to do
9 any poking around out there if they -- if they drill.

10 MR. MICHAEL ROUTHIER: Yeah. Yeah.

11 MR. LES SEGEVAN: We have got some
12 heavy-duty currents and wind and water out there.

13 MR. MICHAEL ROUTHIER: I agree.

14 MR. LES SEGEVAN: That's where we eat
15 from, fish, seals, bearded seals, whales, walrus.

16 MR. MICHAEL ROUTHIER: I think we can just
17 open it up to the public comments.

18 MS. SHARON WARREN: Let me clarify
19 something real quick. Let me just clarify something real
20 quick. We are at the lease sale stage. And what I have
21 here is a diagram of the OCS leasing process. It's a
22 four-stage process. So on this diagram -- and you are
23 welcome to take a copy of it, we are at where the green
24 blocks are. So we are at the lease sale stage. And like
25 Mike said, should the Secretary of Interior allow the

1 leases to go forward, then the companies will come in and
2 file an exploration plan. And that's the next stage, the
3 third stage.

4 Just to clarify, we do have an exploration plan
5 from Shell for the Chukchi Sea. However, we are not
6 formally doing anything with it. We have it in our
7 office. It's on our website. But we are only in
8 discussions with them. We are not doing anything with it
9 because we need to complete this document. We need to
10 have the Secretary's decision whether or not he is going
11 to continue to allow the leases out into the Chukchi Sea.
12 So we are back at the beginning, pretty much at
13 the beginning of the process. So I know there is a lot of
14 things happening because we are at the lease sale. I know
15 that people are talking in the media and out there
16 concerning the exploration, and the companies have also
17 expressed that they are going to go out and drill. But we
18 have to get through this first process first before that
19 can happen.

20 So I just wanted to clarify that because there
21 is a lot of things happening out in the communities and to
22 again say that we are at the lease sale. We are here to
23 collect your comments, your concerns so that we can take
24 them to the Secretary of the Interior. He will be looking
25 at this document as well as when he makes his decision on

1 the 3rd of October, we are still in litigation. It will
2 go back to the Court. There will be briefings. So we
3 are -- there is still a lot -- like Mike says, there is
4 still a lot that has to happen before exploration can go
5 out in the Chukchi Sea.

6 MR. ENOCH OKTOLLIK: What you are saying
7 is you are getting comments. Somebody should set foot on
8 the water out there from the shoreline all the way down to
9 the lease sale areas, you are trying to get comments, and
10 whatever kind of studies they are doing out there, bottom
11 sea, sea studies and whatnot, shallow water testing,
12 seismic work and all those -- all that put together all
13 the way to exploration and production and stuff like that,
14 that's what you are saying?

15 MS. SHARON WARREN: Right. It starts with
16 the lease sale. So all that information prior to the
17 lease sale. So you have a lease sale. Then if there is
18 leases, the leases go, there will be an exploration. And
19 then after exploration, should the companies find anything
20 out there that they want to produce, then you have
21 production. And at each stage of the process, there is
22 review. You know, there is comment, public comments. We
23 will be coming out here and -- like on this chart it says
24 you will be seeing people coming back out in the community
25 or calling the communities to get the communities'

1 concerns and their information concerning every step of
2 the way. So right now we are on the lease sale. But all
3 those science studies and everything else, those will be
4 used when we do the final SEIS.

5 MR. ENOCH OKTOLLIK: Okay. In order to be
6 out there, there got to be ships, right? There will
7 probably be how many ships that will be traveling and in
8 the routes of which direction the ships are going and
9 what -- I'm trying to imagine this, how many -- how many
10 ships will be going out into the Arctic Ocean from the
11 Bering -- from the Bering Sea from a little narrow strait
12 of ships that will be trying to come in through there, or
13 are they going to come from the Northwest Passage and come
14 this way to bring their ships and do studies? We are
15 going to see some activities out there. I don't know how
16 much activities we going to see out in the ocean.

17 MS. SHARON WARREN: Right. The scenario
18 that we have in our environmental impact statement talks
19 about how much of activity would be out there. Also when
20 companies get -- file an exploration plan, there is even
21 more information on how many ships will be out there,
22 what's all going to be involved. So right now the lease
23 sale -- it's our EIS that describes in this scenario how
24 many ships could be looked at to go out there in response
25 to the scenario.

1 MR. ENOCH OKTOLLIK: I don't even have
2 your -- I might have your book already. That's a real big
3 book to try to read and try to understand. Probably if I
4 tried to read it, the first two or three pages I'll fumble
5 because I'm not too much an educated English reading
6 person. I'll fumble on it right away. I'll fumble on
7 that book because I'm not too much of a good reader. But
8 I know we got some good readers out there that will
9 probably understand it real quick.

10 MS. SHARON WARREN: Well, and at the break
11 if you don't have a book, we can give you a book and see
12 in there -- you know, see -- point you to the pages that's
13 mentioned in there. So it will be there.

14 Right now what I would like to do, if it's -- if
15 you are ready to start, would like to pass the mike
16 around. Is it Enoch? You are the mayor.

17 MR. ENOCH OKTOLLIK: Yeah, I'm the mayor,
18 yeah.

19 MS. SHARON WARREN: We can start with you.

20 MR. ENOCH OKTOLLIK: I'll turn over to my
21 first person, the young gentleman over there. He's got
22 good language, and he will give us directions to speak.

23 MS. SHARON WARREN: I was going to turn it
24 over to -- if we had Elders, elected officials and then --
25 and then pass the mike around, and each of you can express

1 your concerns, your information, anything that you want to
2 let us know so that when we go back to finish up this
3 document, that we will have the information to look at.
4 It's going to be transcribed, and we will have it.

5 MR. ENOCH OKTOLLIK: I'm trying to get
6 missing link from the North Slope Borough of the coastal
7 management plan that's going to tie in along with whatever
8 kind of activity is going to be out in the Arctic. How
9 much of that coastal management plan, how much play it got
10 from the shoreline to the -- to the State waters or stuff
11 like that. I got to find out first.

12 MS. CHELSEA THIBEAULT: And I'm going to
13 get you contact information so you can get answers to your
14 question. Okay?

15 MR. LES SEGEVAN: Yes. We need to know
16 that, the coastal management.

17 MS. SHARON WARREN: The area that's out
18 here is for the federal OCS. It's from the three miles
19 out. Okay. So it's beyond three miles. And then if you
20 go -- when we take a break, you go up to the map, and the
21 lease sale map shows you how far off coast the lease sale
22 boundary starts. So who wants to -- start --

23 MR. JOHN HOPSON, JR.: What do I say? My
24 name is John Hopson. I support the lease sale, one,
25 because we need the jobs, the idea of benefits for the

1 community long-term. One -- another reason I support the
2 idea of offshore oil is because our Prudhoe Bay is
3 dwindling down and our tax dollars are dwindling down.
4 With that comes budget cuts.

5 We need this money to continue to educate our
6 students the way we are today. We are top notch in Alaska
7 compared to the rest of the -- the rest of the state in
8 different regions. We have -- we have the best water and
9 sewer facilities in Alaska. So we need to continue to
10 maintain and operate that. Without tax dollars we cannot.

11 We just need this thing. One, because there are
12 a lack of jobs. We are -- we are -- we have a high
13 unemployment rate across the North Slope. We do have
14 concerns. I have concerns with offshore oil and gas, and
15 that's having an oil spill. But the program that the
16 industry has put together has comfort me a lot more than
17 it used to just five years ago. I have a lot more
18 confidence in what they can do to protect our waters and
19 our land when it comes to an oil spill.

20 So I support their lease sale. Once you have
21 your lease sale, then we can talk about ideas of how many
22 ships, how do we mitigate the issues. We can do that
23 later on. That will happen down the road once you
24 complete your lease sale. So I do support your lease
25 sale.

1 We are going to have a lot of people that
2 support this. We are going to have a lot of people that
3 don't support it. But I have to support this for the --
4 for the sake of my children. What are they going to have
5 20 years from now, you know? That's what I'm looking at.
6 What are our homes going to look at -- look like 20 years
7 from now? Where are our people going to go to find jobs
8 if we don't create them? How do I find money to train my
9 people to get these jobs? We can't do it without the oil
10 company.

11 State of Alaska lives off of oil. This is what
12 is going to keep the State of Alaska going. Everybody
13 loves to receive that Permanent Fund, but where does it
14 come from? Prudhoe Bay. Today that's where it comes
15 from, Prudhoe Bay. And that's going to dwindle down.
16 What are our Elders going to have what they need the
17 money, you know? Our companies are making money off of
18 the oil companies. And that's where dividends come from.

19 So I do support the -- the idea of a lease sale.
20 Then we can negotiate talks with the industry within our
21 local community and mitigate the issues. So thank you.

22 MS. SHARON WARREN: As I said earlier, we
23 are just going to pass the mike around, and you can either
24 pass and pass it to the next person or talk. And we are
25 just going to continue to go around the room until

1 everybody feels that they have had their say. And we will
2 be here as long as it takes this evening. Thank you.

3 MR. ALLEN AHLALOOK: My name is Allen
4 Ahlalook. I agree with this young man. Thank you.

5 MR. LES SEGEVAN: My name is Les Segevan,
6 and I agree with John Hopson. We are going to be needing
7 the monies that we are accustomed to living with in
8 Wainwright for our children, our grandchildren, whether we
9 like it or not. We need the gas and oil that we are
10 accustomed to getting monies from. And if there is a way
11 to work it to keep the animals safe, the fish in the ocean
12 where the lease sale is getting ready to lease out, then
13 if it can be done, it should be done, as we going to need
14 the monies in the near future. And the monies coming from
15 Prudhoe is dwindling, and that's true.

16 And then if it can be done, you guys should just
17 go ahead and start, do what you need to do, but you need
18 to do it with public -- North Slope Borough people
19 permission and to see which is the best way to go about it
20 safely for the people and for the animals because we all
21 live together up here. We need the animals and we need
22 the money. If there is a way to do it, then let's go
23 ahead and do it. Needs to be done. Thank you.

24 MS. MARJORIE ANGASHUK: My name is
25 Marjorie Angashuk. I had a friend who was concerned about

1 propane, couldn't go buy any, and she was complaining.
2 She was complaining about one bottle costs too much and
3 she can't afford. She would get mad. And then I told her
4 to start buying a different stove so she won't buy a
5 bottle of propane. Thank you.

6 MR. EARL KINGIK: Thank you. My name is
7 Earl Kingik. I come from Point Hope, Alaska. My tribe
8 take a look at this issue. It's a very important issue
9 for the future of our people and future way of our life.
10 The lease sale already happened, John, over \$2,000,000,000
11 Shell Oil spent, and there is other oil companies that
12 spent a lot of money just for this lease sale. And there
13 is a lot of dots there. A lot of corporations, a lot of
14 companies have already put money from oil companies and.
15 My tribe takes a look at it and said it's time to stop
16 this. We need to tell our own government to slow down.
17 Start thinking about what will happen if there is an oil
18 spill.

19 I had a chance to go down to the Gulf of Mexico
20 to take a look at the oil spill. I spent down there one
21 week, and no cleanup was happening. Nothing. Nothing was
22 moving. Oil was coming to the shore. And we decided to
23 take our own government to court, and that's how come this
24 lawsuit exists. Native Village of Point Hope, Alaska
25 Wilderness League, Northern Environmental, Pacific

1 Environment, all the environmental organizations of Alaska
2 put this thing together and took it to court.

3 The government got to slow down. We got to
4 consider how we are going to stop this if there is an oil
5 spill because there is already a lease sale going on.
6 Shell Oil already got their plan ready to go to Obama, and
7 we'll be down there when Shell Oil submits their plan to
8 Obama. Our tribe will be down there when BOEMRE submits
9 their tribe [sic] to the Secretary of the Interior.

10 So you see we are not really against offshore,
11 but we want to do it safe way because the next Coast Guard
12 that would go up and clean up is 1,000 miles away. When I
13 went down there to the Gulf, there was over 30,000 people
14 cleaning up that oil spill. We don't have a long runway
15 to bring in jets to bring these people. We don't have no
16 rooms to have people to sleep and to eat. We don't have
17 much stuff. We don't have commercial fishing boats to
18 help the oil companies clean up.

19 So you see -- and that's how come we took the
20 government to court because they were moving too fast.
21 And they need to listen to us.

22 And I'm glad you are thinking about jobs, John.
23 We are thinking about jobs too. There is alternative
24 jobs. There is other ways we can make money. But we got
25 to think about the animals we love and the world we live

1 for thousands of years. Thank you.

2 MR. ENOCH OKTOLLIK: (Inupiaq.) Go ahead,
3 Billy. You look like you want to say something.

4 MR. BILLY NASHOALOOK, SR.: I'm Billy
5 Nashoalook, retired from everything. And I was just
6 reading the Sounder today. I don't know if most of you
7 have read it. There were comments during the Summit down
8 in Alyeska. We know the oil companies will keep coming.
9 They are going to be coming and coming no matter what we
10 say. But, the only way we can get most of what we want is
11 to work with them and these other people that --

12 UNIDENTIFIED SPEAKER: House on fire.

13 (Off the record.)

14 MR. BILLY NASHOALOOK, SR.: Anyway, what
15 we need to start doing, we need to go after the State
16 lawmakers, maybe Governor Parnell, to work with us and
17 work with the State of Alaska to get with the federal
18 government to start helping. I would comment that our
19 Congressional delegation is working with us, but not the
20 State. And so we need to go after the State of Alaska to
21 stand up in allowing this to get -- if we don't do that,
22 they will just run over us anyway. We don't have any
23 money to fight them with. They do. They have all kinds
24 of money that they can use to get what they want.

25 But if we work with them [indiscernible] and for

1 future generations to have what they need for our culture.
2 And that's what they have to say on in the Arctic Sounder
3 I was reading. And these people.

4 MS. SHARON WARREN: The court reporter
5 can't hear, so --

6 MS. CHELSEA THIBEAULT: He would like to
7 get an introduction of who you are.

8 MS. SHARON WARREN: We are a federal
9 agency, so we all work -- Mary is a court reporter. She's
10 the court reporter for us. But we work with the federal
11 agency that does the offshore energy and minerals and
12 regulates the offshore minerals. And we are within the
13 Department of the Interior. We are not an oil company.
14 We are not a nongovernmental agency. We are federal.

15 MR. BILLY NASHOALOOK, SR.: I want our
16 people to understand that people like this, we need to
17 work with them and we need to also go after our State
18 lawmakers, according to what I read today.
19 [indiscernible] Get together with what we need according
20 to how we live up here.

21 MS. SHARON WARREN: Thank you very much.

22 MR. FRANK BESTER, JR.: My name is Frank
23 Bester. I guess I'm halfway supporting and not supporting
24 due to the fact of some of the endangered species. And I
25 support it halfway because of money-wise. That's the

1 comment I got, so --

2 MR. CHARLES EKAK: Hello. My name is
3 Charles A. Ekak. I'm a subsistence hunter. And what I
4 think we need to do is have a little bit more
5 understanding between the agency here and the community
6 itself. If that can be materialized, then we can
7 compromise and see what come down at the end. I don't
8 know about the -- but the way things are going, with a
9 little bit more explanation and understanding, we can
10 compromise in the community. That way I think it will
11 be -- we can work it out.

12 To me, it's -- I'm for it, I'm against it and
13 not in between, but I can understand it and I know what it
14 means. As long as you can make it more presentable, that
15 will make it much easier on an Inupiat village like us.

16 Thank you.

17 MR. ENOCH OKTOLLIK: My name is Enoch
18 Oktollik. I'm the mayor of the community and I'm -- I'm
19 the chairman for the North Slope Borough Fish and Wildlife
20 and also chairman for the Nanook Commission and also a
21 member of the walrus commission and member of the
22 Northwest Caribou Working Group. And my comment, boy,
23 I'm -- it's been blooming out, expanding.

24 And I grew up -- I grew up in Point Hope, and I
25 grew up with this gentleman here. And I know what he

1 feels because he's probably feeling the same thing with
2 our cousin Amos Lane feel of the industry going out
3 because they live the subsistence way of living where we
4 come from, from -- from that direction. And I could
5 understand John Hopson, Junior. We got 40 percent of
6 working people in our community right now. And that's --
7 and most of it come from the North Slope -- North Slope
8 Borough, the most strength of our working people. But we
9 got a corporation that is expanding and putting -- trying
10 to put some people to work right now, and probably it's
11 going to grow into the future and increase our workforce
12 of our community.

13 And I also went to some meetings in the Borough
14 where we were told that every year six percent of the
15 Trans-Alaska Pipeline, six percent is reducing from the --
16 from the pipeline. And that's going to increase into the
17 future. And right now we are working with some people
18 like WH Pacific and trying to get some windmills, some
19 type alternative energy to support our community to reduce
20 cost.

21 In our community, if you go to our stores --
22 probably if you went to Anchorage -- I don't know how much
23 a carton of milk is in Anchorage, maybe \$2 or something.
24 I don't know. How much would a milk be? Would somebody
25 let me know how much a carton of milk is?

1 MS. SHARON WARREN: A gallon of milk in
2 Anchorage. A gallon of milk in Anchorage is about 4.79.

3 MR. ENOCH OKTOLLIK: 4.79 a gallon. And
4 probably would be \$20 around here for a gallon. But we
5 hear the people crying in the Lower 48 with our gas, our
6 gas guzzling, and they are trying to improve the mileage
7 in the vehicle. But seems like they are doing a very poor
8 job. And right now probably -- probably a good car burns
9 25 miles per gallon right now, and they have been trying
10 to improve it to 50 miles per gallon.

11 But in the Lower 48, when their gas go up to
12 \$3.90, they cry about it. And in Anchorage -- we watch
13 them in the news. They start making noise when their gas
14 that going to \$3.80 or even \$3 for -- even past \$2 they
15 will start making noise. Up here right now in the coldest
16 part of the day, we will pay \$6.08 a gallon. And we don't
17 cry about it.

18 And we are lucky we are getting subsidized
19 somehow with our oil, with our heating oil. We are paying
20 at least probably a \$1.53 a gallon of oil, but our
21 corporation is helping us somehow or the Borough is
22 helping us, how we are putting heat into our homes. And
23 some of these things you will see. Our cost of living is
24 so high because we are so remote.

25 And the way our federal legislators, the way

1 they write the language of hauling -- hauling our
2 material, like if I bought a -- I'll use an example of a
3 300 -- 400-pound snowmachine. If I got a snowmachine and
4 it cost me pretty well almost \$7,000, and the weight of it
5 is almost -- I don't know. How many pounds is a
6 snowmachine, Isaac?

7 MR. ISAAC PANIK: 400.

8 MR. ENOCH OKTOLLIK: 400 pounds. And we
9 use Northern Air Cargo, and they charge us at almost 90
10 cents a pound, I guess, from Anchorage to Barrow. And 90
11 cents times 400 is how much?

12 UNIDENTIFIED SPEAKER: You mean 4,000?

13 MR. MIKE HALLER: About \$400.

14 MR. ENOCH OKTOLLIK: \$400, and then it's
15 probably about 80 cents a gallon -- I mean 80 cents a
16 pound from Era Aviation from Barrow to here. By the time
17 I'm trying to get a snowmachine up here, it cost me almost
18 extra two more thousand dollars.

19 It goes on in our lives like that. But what
20 does it all mean with oil industry that is going out in
21 our area? But I'll tell you that 40 percent of our
22 community is employed and 60 percent is unemployed.

23 I have dreams in my head that start turning
24 because in our community, sometimes some people won't tell
25 you because we got 60 percent not employed. They are not

1 going to even tell you they are running out of food in
2 their homes, but we got at least 15 families in our
3 community that go without. And sometimes it reach where
4 we are working to try to collect a food bank for our --
5 for our community. And it hurts sometimes when you are
6 trying to collect food for -- for a food bank, try to
7 share with them.

8 But people won't go out without jobs. You guys
9 are working people. You don't even have to worry. Maybe
10 you might have families that you have seen in your
11 families that try to struggle. And way high cost of
12 living in our community, it's unbearable sometimes.

13 And when you go out hunting, our shelves in our
14 stores, we go buy bullets, and they are almost \$30 a box
15 now for a box of bullets. And on top of that, if you are
16 going to go out hunting, some of our boats go from 50
17 horse to 115 or 200-horsepower. And the more you go up,
18 the more they burn gas. And sometimes for good hunting
19 time, you got to spend at least -- go with about 45
20 gallons of gas, \$6 -- \$6.08 times 45 gallons is almost --
21 how much is that?

22 MR. ISAAC PANIK: A lot. A lot.

23 MR. ENOCH OKTOLLIK: About \$300 about to
24 go get gas, to burn gas. And on top of that, you got to
25 go to the store and go purchase some food. That will

1 probably be another 2 to \$300. You go to the store to go
2 get food, but you are fortunate enough, if you like to eat
3 Eskimo food, that will be noncost item. But not too many
4 of our children right now supplement themselves with our
5 Native food to go out there to go hunting.

6 But by the time you are going to go out to
7 gather our local food -- like right now it's for bearded
8 seals -- and also for walrus and for birds and whatnot.
9 If you don't get caught -- some of them are illegal birds.
10 Like this one guy say, there is probably some birds that
11 are endangered, and it's hard to catch -- hunt them
12 sometimes because they are endangered. And you are going
13 to try to put something into the table of a -- on the
14 table to eat, and it hurts sometimes when you have to try
15 to go hunt and you have to put almost \$1,000 to go hunt in
16 one trip.

17 That trip might be from six hours to one day,
18 two days, to try to harvest something. If you don't see
19 what you are harvesting out there and you don't see the
20 weather right or stuff like that, you lost all that for
21 not harvesting something.

22 But that's the kind of stuff we see in our
23 community right now because cost of produce and goods and
24 the stuff we use to motorize our boats and stuff like
25 that, snowmachines, Hondas. Not too many of us go dog

1 teaming right now. That would be less cost, but there
2 would be a little cost if you had dog teams to bring your
3 food in and out.

4 But cost of living is real high in our
5 community. If you guys take time and spend time -- I know
6 you guys just come and go, but nobody observes of coming
7 and see how we live like day-to-day like. If you go out
8 and go see to our stores and observe how much food items
9 cost, how much fuel we use and all that, same time you are
10 going to go hunting, you spend about \$1,000, same time you
11 are thinking about your light and power, how much you
12 going to pay a bill for your light and power, your water
13 bill and your heating and stuff like that, you got to
14 supplement all those together.

15 By the time you probably have to be a good hard
16 working man or something. To find a good job today right
17 now, you got to find a good job that pays you pretty well,
18 almost \$50 an hour the way our society is living now in
19 the U.S. The cost of living is getting so bad. You watch
20 it in the news. You guys watch it yourself, too, that
21 our United States is so much in debt, it's going to be
22 able to recover. But every time they take time to
23 recover, you think what it feels like us that live in the
24 remote area, how much we are getting crunched every time,
25 how the Lower 48 is going.

1 We are probably not as bad as they are because
2 you see the hurricanes and you see the tornadoes and
3 whatnot in the Lower 48 you are seeing.

4 We got a television now. In fact, we pay about
5 100-and-some dollars a month to watch good -- get good
6 channels and watch CNN and watch our local news, news
7 media and whatnot of how the world going out there.

8 But that's the kind of community you are looking
9 at here in Wainwright. Somehow it's got to fit. And when
10 you go out -- like I told you, it start blooming things
11 into my head. I start thinking as the mayor, boy, if
12 we -- because the federal government says if you go out
13 there, if it benefit the federal, if it benefit the State
14 and if it benefit the private sectors and it benefit a
15 little local government, how much it would be -- how much
16 it would help us here if we try to decide, the people, if
17 they want to decide what kind of money we could get off
18 this oil and gas development or we could turn to the
19 natural gas, how much it would be easier for us in our
20 community in subsidizing what we use to heat our homes and
21 motorize our boats and going hunting out there.

22 I know that shipping going to be a big thing if
23 the activities start going in the Arctic Ocean. I see
24 probably almost over 1,000 ships that going to probably
25 travel to our ocean, the Arctic Ocean. And what route are

1 they going to use? Are they going to use the Bering
2 Strait to bring their ships through where our migratory
3 birds, our migratory whales, belugas, others that migrate
4 and go birth their young in the summertime? Most -- a lot
5 of birds, sea mammals, land animals come to the Arctic to
6 go bear their young. And how it would be drastic if they
7 got hurt by an oil spill or stuff like that, how much we
8 would -- because we are consumers of these Native foods,
9 what were -- we got the right to hunt them right now.
10 Maybe we are the only unique kind of living
11 human beings that could benefit out from the ocean and
12 from the land and from the sea -- I mean, from the air.
13 But it seems -- like I told you, it trickles my mind.
14 Boy, they going to come and they going to go and pump out,
15 produce 3.7 billion barrels of oil from the -- from the
16 popcorn area from Lease Sale 193. And they will probably
17 dump out another 3.7 billion barrels of oil from -- from
18 the Beaufort -- Beaufort area. What does it mean?

19 But when it open my mind to my community, I want
20 to try to get that -- that impact money, which is going to
21 the North Slope Borough now and which is not going to our
22 community, the most impacted community, this community and
23 Point Lay. The activities that are about to come, I
24 started looking at that impact money.

25 If we conclude together, my -- our community and

1 get 3.5 million dollars in the life of that Lease Sale
2 193, it could go to 30 years out there. And if we get 3.5
3 million dollars of that -- of some kind of funding impact
4 money to this community, our people would decide what --
5 it will open my mind for 30 years. 3.5 million dollars
6 for 30 years would probably almost bring us already almost
7 \$100,000,000.

8 And our community, I thought they could be able
9 to use that as capital money. They could decide or they
10 could -- they could make a dividend, make -- make a
11 dividend that grows off its interest for 30 years of that
12 \$100,000,000. And if they invest it right, they could
13 grow and they could benefit from it. And possibly like
14 the Nuiqsut people, we could get quarterly dividends
15 somehow. Because I think of that, amongst some of our
16 people that cannot make it today because we got 60 percent
17 unemployed.

18 But I worry about, like, what John Hopson,
19 Junior said. Six percent of that Trans-Alaska Pipeline,
20 the crude oil is diminishing and it's -- we are getting
21 tax money, royalty money into there, and it's funding all
22 our city powers that we turn over to the North Slope
23 Borough, and they fund all that. And it brings us almost
24 \$150,000,000 every year spending from the North Slope
25 Borough and give us leisures of taking care of our roads,

1 our light and power, our educational systems, our clinics
2 and all that when you put them all together. A lot of
3 things start -- start opening in the head, our head when,
4 kind of things that are going to be impacting us because
5 of oil and gas development.

6 But I look -- I want to get some of that natural
7 gas, that natural gas, trillions and trillions of cubic
8 feet of natural gas. Boy, it opened my mind if this
9 community could be able to get that natural gas and we
10 could spear in somehow to the natural gas, it would make
11 it easier for us from today till the day it wear out,
12 maybe 300 years from now.

13 But I know that we can't -- the state of Alaska
14 cannot make it on alternative energy alone. We got to
15 have some kind of resources that we are going to utilize.
16 But every time we miss that resource, we lose some of that
17 money. We know we are going to lose the oil and the gas
18 that's sitting out there. We are not given the power to
19 try to go put it ourselves and put it into the market.
20 Just think how much it would benefit us if we could be
21 able to go pull that oil out and that natural gas and we
22 could be able to sell it to you folks for -- boy, that's
23 almost -- how many trillion dollars, boy, this community
24 could make and its neighbors.

25 But sometimes my mind, it tries to get expanded

1 and think about things, and I'm trying to bring you guys
2 on the trip, a plane trip and back to reality. That's
3 what I feel and that's the only thing I got to say.

4 Thank you.

5 MS. SHARON WARREN: Thank you.

6 MR. ISAAC PANIK: Good evening. Good
7 afternoon. My name is Isaac Panik. I'm torn, torn. I
8 love to hunt. I love to eat what I hunt. Right now I
9 don't see any Coast Guard bases being built up here before
10 oil development is done. I feel as if this community and
11 this region is being treated as third class. Our -- the
12 United States is one of the most productive -- supposedly
13 one of the most productive and advanced civilizations on
14 this earth. And still, I -- I'm torn.

15 I -- I joined Uncle Sam's Army to help defend
16 this country and its people, and yet still I feel as if
17 this community and this region is -- is -- is being
18 treated as third class. My trust in the White people -- I
19 hate to say this. My trust in the civilized people is
20 very little. They say one thing and do another. And it
21 really hurts.

22 Us Eskimos, we help each other. We expect --
23 we -- we -- as a hunter, we know they will help us if we
24 break down. We know they will come to our aid. Down in
25 the Lower 48, you do that, you go down there and you go

1 out hunting, I don't know. But I sure do hope we have the
2 Coast Guard come up and build a base up here because just
3 in case if there is an oil spill up here, where is the
4 next base closest to us and how long will it take for them
5 to come up with their resources to contain this oil spill?

6 Well, I thank you guys.

7 MS. SHARON WARREN: Thank you. Who else?
8 Is there anybody else that would like to speak? No? If
9 not, I guess we are done. Thank you very much.
10 Appreciate it.

11 MR. LES SEGEVAN: Did you get the
12 information you need?

13 MS. SHARON WARREN: Yes, we did. With
14 your concerns and your comments that you provided us, it's
15 in the record and we have that before us when we go back
16 to our office and we will have our analysts take a look at
17 it and incorporate it. And Mike will be involved in
18 incorporating it in the final document that comes out.

19 MS. CHELSEA THIBEAULT: Were you going
20 explain how to make more comments on-line?

21 MS. SHARON WARREN: Yes. If you can -- we
22 have handouts here, so please take them tonight with you
23 and take a look at them. And I can turn it over to Scott
24 real quick here, and he can kind of walk you through this
25 handout.

1 MS. CHELSEA THIBEAULT: So if any of you
2 didn't feel comfortable speaking tonight, they are telling
3 you right now how you can make your comments without
4 having to speak tonight. Okay?

5 MR. JOHN HOPSON: Make positive comments.
6 We need the oil and gas.

7 MS. SHARON WARREN: So even though you
8 didn't comment tonight, this is another way. We will take
9 your comments until July 11th.

10 MR. JOHN HOPSON: We as Inupiat people can
11 work with other people. And we can -- and we can make
12 this work if we work with the federal government and work
13 with the oil companies. If we take them to court, we
14 can't talk to them much. They -- only the judge will
15 speak for us or our lawyers will speak for us. When we
16 work together, we can sit down and make things happen.
17 Make positive comments. Thank you.

18 MR. SCOTT BLACKBURN: Okay. What she's
19 handing out to you is -- it looks harder than it is. It's
20 a step-by-step way of putting comments on-line. So you go
21 to your computer. You go to your computer and use an
22 Internet connection. You start at step 1 on the first
23 page and you do what it says. It says go to the BOEMRE
24 Alaska Region website, and that's in blue right below it.
25 So if you type in that blue address, it will take you to a

1 page that looks just like this. So it's showing you what
2 will be on the computer screen.

3 At the bottom of the page is step 2. It's in
4 gray there, dark letters. And it tells you to find Alaska
5 Region News and the appropriate link there, which is
6 indicated in red in that screen. So it tells you where
7 you need to go, and you click on that with your mouse.

8 You turn the page, and this is the screen that
9 will show up. At that point, you click on the step
10 indicated in red, step 3, and that's indicated at the
11 bottom of the page. You can read that. It says find the
12 Federal eRulemaking Portal in bold print two-thirds of the
13 way down the page. And that's what's indicated in red.

14 So you click on that. And that will bring up
15 this next page, regulations.gov. And there you will see
16 our notice for this document. And in order to submit a
17 comment, all you need to do is click the orange button at
18 the top there where it says step 4 in red. And when you
19 do that, it will bring up the next page. And these are
20 the things, again, that you will see on the screen as you
21 are going through it.

22 The next page shows you the actual page where
23 you would input your comment. So you can -- you would
24 need to write your name and your address, et cetera, and
25 all the points that are indicated by the little blue

1 stars.

2 And then in the space on the right are the page
3 over here where it says step 6 in red. That's where you
4 would write your comments. You can just type your comment
5 in there. At that point you can be through and you can
6 hit submit which is down in the right, the orange button.
7 Or you can -- if you want to prepare a statement in a word
8 processing program or some other program, you can prepare
9 a statement and then upload that document. Okay? And
10 these steps, 5, 6 and 7, walk you through that process.

11 At that point, if you are uploading a document,
12 the next page shows you how to upload a document. If you
13 are uploading a document, it will pull up the screen while
14 you browse to your document in your computer and open that
15 up and attach it.

16 But like I said, you can just type your comment
17 into the box if you prefer and hit submit. And then it
18 will tell you whether you have completed that successfully
19 or not. If you completed that successfully, you will get
20 the very last page and it will say success. Your comment
21 has been submitted. And that's it.

22 And if there are questions about that that may
23 seem hard -- I don't think it will be when you sit down to
24 do it. There is a phone number on the back, and you are
25 welcome to call us. Hopefully they will send you to me.

1 If I'm not there, one of my other colleagues will be happy
2 to help you, and we can help you walk through it over the
3 phone.

4 MR. ENOCH OKTOLLIK: You can provide me
5 with a lawyer that would help me write a good comment?

6 MR. SCOTT BLACKBURN: You are welcome to
7 call us and we will help you.

8 MR. LES SEGEVAN: Is this your office
9 phone?

10 MR. SCOTT BLACKBURN: The office phone,
11 uh-huh.

12 MR. ENOCH OKTOLLIK: Looks like it's
13 pretty explanatory here. I'll --

14 MR. SCOTT BLACKBURN: We tried to put each
15 step clearly and along with each step is what you'll see
16 on the screen. So it should look like that as you go
17 through it. If it doesn't, then you have got a problem.
18 Give us a call.

19 MR. ENOCH OKTOLLIK: Make sure you guys --
20 because we are Native-speaking people and sometimes our
21 comments come out better from our Native language. Maybe
22 it would be good for you to try to get an interpreter and
23 interpret -- get an interpretation in Inupiaq. Get a good
24 interpreter because sometimes our language come out better
25 by our Native language or what we say probably come out

1 better because we are Inupiaq-influenced speaking
2 language.
3 I'll speak for me, anyway, because I speak
4 broken English because I just -- I graduate from high
5 school with a D from high school in English, but I never
6 learned your dictionary too good. It's hard trying to
7 speak English.
8 MR. SCOTT BLACKBURN: I think that's a
9 good idea, and we --
10 MR. ENOCH OKTOLLIK: Probably would
11 have -- I flunked maybe English bad.
12 MR. SCOTT BLACKBURN: Your suggestion has
13 been made by others, as well.
14 MR. EARL KINGIK: Got the message these
15 guys don't need to take to their boss because I had a
16 chance to talk with their boss, which is Dr. Kendall, and
17 he's willing to put somebody in the Borough office to
18 coordinate these kind of meetings to educate the
19 communities about this meeting, about issues that these
20 people will have. That would be a good recommendation to
21 Dr. Kendall, that you guys do get an interpreter. We
22 heard that before in other villages.
23 MR. LES SEGEVAN: That would be the best
24 because we have some Elders who would like to speak up,
25 but they don't know English. They have been here longer

1 than us.
2 MR. EARL KINGIK: I would interpret all
3 right, but I would benefit offshore, and it would be right
4 for me.
5 MS. SHARON WARREN: In addition to use of
6 a computer, if somebody wants to write their comments and
7 put them in the mail to us, we will also take them in the
8 mail. So maybe some people don't have a computer, and if
9 you want to write down your comments on a piece of paper,
10 you can provide them as well. And if it's got the Inupiaq
11 language on it, we can take that and we will get somebody
12 to interpret it for us in the document. Okay.
13 MR. MIKE HALLER: Mr. Mayor, we have had
14 some good interaction with Maggie and Stephanie, and they
15 seem pretty good about operating with a computer because
16 I've had e-mails back and forth with them. May I offer
17 that perhaps they could put down some of your comments and
18 send them to us and we could include them then?
19 MR. ENOCH OKTOLLIK: Little bit of
20 spending money to do your work for you.
21 MR. MIKE HALLER: A little bit of spending
22 money. You just never know how that goes.
23 MR. ENOCH OKTOLLIK: If you can give us a
24 little bit of spending money, I can make comments. It
25 takes money to keep them computers operating. Send them a

1 little funding money, yeah.
2 MS. SHARON WARREN: We will take your
3 comments, you know, that we have heard tonight back and
4 put it in the document. And again, thank you. Again, I
5 know this is not a good time to come out because of your
6 subsistence, and we apologize. We are on a court
7 deadline, so this is not necessarily a good time, so --
8 but I think that you -- I thank you for allowing us to
9 come in and making the time so we can hear your comments
10 and take them into consideration, because that's what we
11 need is we need to have the comments from the people on
12 the ground.
13 Thank you very much.
14 MR. LES SEGEVAN: When would be the best
15 time to expect results of these meetings that you are
16 having?
17 MS. SHARON WARREN: We are going to take
18 comments until July 11th, and the next document will be
19 called the Final Supplemental Environmental Impact
20 Statement, and it will be out the first part of September.
21 We will be mailing them out to the communities like we did
22 this time. We mailed a lot of them out. If you -- we are
23 also going to be taking a look at who testified as well to
24 get a hold of you to see if you want to have a copy of it
25 come out. And we are also looking at ways best how to

1 communicate the results from when we come out.
2 A lot of times we come out, we take comments
3 from you, and then you don't see us again until the next
4 time we want comments from you. So we are trying to work
5 out a better way of getting feedback to you and how your
6 comments were incorporated into the document. So we are
7 working on that.
8 MR. ENOCH OKTOLLIK: It was good on
9 this -- on that EIS for little local governments to be
10 able to print this page and whatnot and what's written in
11 there from the Secretary of Interior. That was good when
12 they come out the first time that we be heard and included
13 in there.
14 MS. SHARON WARREN: Right. Right. And
15 when the final document comes out, part of it will have
16 the appendices in it with all the transcripts, and then
17 also in there we summarize the comments and we respond to
18 them. So you know, you may see quotes from yourselves in
19 there of how we, you know, took a look at what you were
20 doing, what you told us, and then our analysts, our
21 scientists, our oceanographers, will take a look at it and
22 respond to the information.
23 A lot of times we do make changes in the
24 document because we get correct -- you know, better
25 information from the community, meaning how we said things

1 and how we were first looking at them. So again, we will
2 be sending out the final document sometime in early
3 September because the Secretary by the Court has to make a
4 decision. The Court wants a decision filed with the judge
5 on the 3rd of October.

6 MR. ENOCH OKTOLLIK: It's good all right
7 to make comments, but you got to do it professional way to
8 do comments and to be heard. And the borough mayor, he's
9 got workers -- they got enough money in the borough to --
10 the borough mayor to make comments. He's got people
11 working for him. But in our city here, we don't have that
12 big of money -- big money to try to get a lawyer or people
13 to write languages down to make comments. It's very hard,
14 or to even review that EIS if we wish to make comments and
15 stuff like that.

16 MS. SHARON WARREN: I know the EIS is
17 large and it can be hard to read, as well, but there are
18 some sections in it, like on subsistence; you will see
19 some words and areas that we are looking at. And so maybe
20 if you -- just like in our office, not one person writes
21 the document. There is a lot of people that write the
22 document because they are expert in their field in a
23 certain area, so they just write in that area.

24 And then so I would ask -- like in the
25 community, I'm sure there is individuals here that are

1 experts in certain areas, and to take a look at those
2 areas, you know, that you are interested in to make sure
3 that we have it right and give us their comments. Even
4 though we get comments from a lot of organizations and
5 everything else, but getting comments from individual
6 members of the community also is important because you are
7 actually going out there. You are actually living. You
8 have what the Elders handed down to you from your own
9 family that maybe somebody else wouldn't have that would
10 be important for us to consider.

11 UNIDENTIFIED SPEAKER: How far are you on
12 this development program?

13 MS. SHARON WARREN: On that one? Okay.
14 Let me explain on that. This lease sale that we are
15 talking about tonight was in the five-year program that
16 was approved from 2007 to 2012. The Department of the
17 Interior and our agency right now is working on the next
18 five-year program for 2012 to 2017. And I believe that
19 some of the folks in our organization came out here to do
20 scoping meetings -- Mike, were you on that trip that came
21 out and did scoping meetings?

22 MR. MIKE HALLER: I was.

23 MS. SHARON WARREN: Okay. That came out
24 and did scoping meetings to start preparing a draft
25 environmental impact statement.

1 UNIDENTIFIED SPEAKER: So are you on the
2 third-year plan or the second year?

3 MS. SHARON WARREN: Right now we are on
4 the 2007-2012. Actually, there has been -- there may have
5 been four five-year programs that have been done. It
6 started in 1978 when the law -- when they changed the law
7 for the Secretary to do five-year plans, five-year
8 programs for every five years. So there was -- so this
9 program was -- this sale was in the 2007-2012. In fact,
10 it was in even the one that was before that, 2012 -- it
11 started out in 2002-2007, but the sale wasn't able to be
12 completed because the draft environmental document wasn't
13 going to be completed in time to have it in that program,
14 so it rolled over to the next 2007-2012 program.

15 UNIDENTIFIED SPEAKER: That's in between?

16 MS. SHARON WARREN: Yeah, right. So we
17 are at the tail end of the 2007-2012, this lease sale. We
18 have started the 2012-2017 five-year program just scoping
19 it out, coming out to the communities. There has been no
20 decision on any sales. They are looking at three areas,
21 the Beaufort, the Chukchi, and Cook Inlet, but there is
22 no -- there isn't any decision on how many sales.

23 The Secretary of the Interior -- for the
24 2007-2012 there was supposed to be two more sales in the
25 Beaufort Sea and two more sales in the Chukchi Sea in

1 addition to sale 193. He canceled those sales. Okay. So
2 he wanted to take a cautious approach to oil and gas
3 offshore oil and gas leasing in the Arctic. So he
4 canceled those sales. The only sale he left in the
5 five-year program was this lease sale.

6 So he left it in the five-year program. That
7 even went through litigation. And so that stayed in this
8 five-year program. So now we are at the lease sale. So
9 you will see probably -- I don't know when -- I don't know
10 if it's later this year you will see the agency send out
11 to everybody a draft environmental impact statement on the
12 five-year program. So again, you will see agency people
13 coming out here when that document comes out asking for
14 your comments. So you will be seeing that.

15 So there is a lot of times because we have
16 this -- and another thing you may see. If -- you may see
17 if something -- should the lease sale get approved, you
18 may also see us coming out here concerning an exploration
19 plan. But if you take this diagram tonight with you, you
20 will see the reason why our agency comes out so often to
21 get your comments and concerns because it is part of the
22 law for us to come out here and get your comments and
23 concerns when we are -- when we are preparing our document
24 and preparing for a decision because we need the input of
25 the public and the communities.

1 MR. ENOCH OKTOLLIK: We are looking at
2 this lease sale here, and on the Beaufort side -- we are
3 looking at the Beaufort on this side. And we don't really
4 know -- us, we don't have the money as Natives. I don't
5 know if we have divers or anything like that or basket
6 spears or stuff like that to do assessments in this area.
7 But it was good and sometimes they gave us a set of water
8 testing in this area of the ground fish and what all the
9 assessments are in this -- in the ocean, plus the
10 migratory -- migratory birds, sea mammal, fish and whatnot
11 that goes through this area.

12 And today we don't even know -- I don't know if
13 my good friends here know and my friend and my relatives
14 and stuff if they know of the assessments in these because
15 we don't -- we don't have that kind of money to show you
16 our opinions. We want permission in here because there is
17 [indiscernible] of some type in here that travels this way
18 where the bowhead whales travel, we --

19 Like the gentleman Earl said that you have got
20 to slow down and to go in here to do your -- to do the
21 production, but you got to give us a study of what's in
22 here inside -- under here in the water, if there is
23 pollock, if there is pollock here, if there is crabs and
24 all that, the little critters and whatnot that live in
25 here in the ocean. But we don't even know.

1 Us, maybe some Elders have talked to some people
2 or maybe we might have had Eskimo divers that went in
3 there to the bottom of the floor and study it, but we
4 don't have that information what's in there because we are
5 looking at the transportation -- Northwest Passage going
6 to come to us one day, and then the Northwest Fisheries
7 Service will come this direction. Tourism will probably
8 impact us into the future and probably oil and gas. All
9 those will impact us here in the Arctic Ocean.

10 Maybe Billy knows of Evan Hopson and their work
11 in the circumpolar work. Evan Hopson, I guess he was one
12 of our North Slope Borough mayors, and he made this area a
13 nuclear free zone in their languages and whatnot. But I
14 want to know myself what's in here, the bottom studies of
15 what is plentiful or so that we could probably try to know
16 what's in there for us to try to harvest and sell
17 commercial.

18 We don't know what kind of fish migrate through
19 here. We barely catch them sometimes. We get silver
20 salmon, king salmon. There is no studies like that that
21 are being conducted in here and given to us, but some of
22 those information got to be -- be given, all given to us
23 at one time or another of what's being impacted that is
24 plentiful out there in these two bodies of -- in these two
25 part of the seas and whatnot.

1 I hope you understanding what I'm trying to get
2 at. But I still want to get information from her what --
3 what the coastal management and what it -- what it is all
4 about and how it ties in with the State, the federal and
5 our -- the private people here.

6 MS. SHARON WARREN: Thank you. Yes, there
7 has been studies out there in that area. We have a
8 studies program. And in our document it mentions some of
9 the studies they have done out there. We just need to do
10 a better job to let you know about the studies that have
11 been done out in that area and the studies that are
12 ongoing. I did bring -- on our website there is a list
13 not only of the ongoing studies, but also the completed
14 studies that our agency has done.

15 Of course, there is many people out there who
16 have been doing studies over the course of time out there,
17 and I think it's just a matter of coming to the community,
18 and those individuals who have done the studies to come to
19 the community and say, you know, here is where the
20 information is. At least how -- how it was collected by
21 the federal government or from another research entity and
22 all. So -- and I guess that information is not getting to
23 the community members is what I'm hearing.

24 MR. MIKE HALLER: Mr. Mayor, would it help
25 if we put together -- just thinking off the top of my head

1 now, which is dangerous -- but just thinking about this
2 because we have heard this other places. Would it be
3 useful for us to bring a few folks, two or three, to come
4 out at a time that's agreeable to you where we plan that
5 time and we come and we review some of these various
6 studies and step over the top of them and talk about them?

7 MR. ENOCH OKTOLLIK: Yeah, the people like
8 this that do that kind of stuff, you got to bring them
9 here and tell us about -- give us all that information,
10 what the assessments are out there in our ocean.

11 MR. MIKE HALLER: We can talk about these
12 things.

13 MR. ENOCH OKTOLLIK: Because it's going
14 too fast, your getting the EIS and stuff like that. We
15 don't even know what's assessed out there, what's got to
16 be out there in the ocean, what's going to be impacted out
17 there in the ocean.

18 MR. LES SEGEVAN: Which companies have
19 been poking around out there?

20 MS. SHARON WARREN: There has been
21 companies -- there is research entities. Universities
22 have been out there. I just don't have the list of the --
23 the -- our agency partners with a lot of entities to go
24 out and do studies. We have an environmental studies
25 program that has been going on for many, many years, for

1 decades, and a lot of money has been spent going out there
2 in the area to collect information. So we can see if what
3 we can get from folks to come out here and let you know
4 about the studies in the environmental studies program and
5 then see who else has been out there. But there are
6 entities that have gone out there to do research.

7 National Marine Fisheries Service, I think has
8 been out there, NOAA. I think I just read in the paper
9 that the Healy, NASA, was -- has a ship coming out here to
10 do research, so --

11 MR. ENOCH OKTOLLIK: It's not only oil and
12 gas. It's the Northwest Pacific Fisheries Service are
13 looking at the Arctic Ocean, tourism in the Northwest
14 Passage. A lot of things there in the Arctic Ocean. And
15 we got to be prepared about --

16 MR. LES SEGEVAN: That's true. They are
17 getting ready to come. We need to find out what's out
18 there in order for us to protect it the right way.

19 MR. ENOCH OKTOLLIK: We know that they are
20 doing the commercial fishing down there in Bristol Bay and
21 them areas, and the Bering Sea and whatnot, and they are
22 ground fishing that as hard as they can already. And we
23 are going to see them pushing toward our area because it's
24 plentiful with pollock and crab in the Arctic Ocean. And
25 those are the things that are going to push them this

1 direction to try to do commercial -- commercial work.

2 It's not only oil and gas. They are going to be
3 looking out into the future in the Arctic Ocean. We got
4 to know the assessments there already and what these
5 assessments mean to us. The little microorganisms, like
6 somebody say, that's out there in the ocean and the chain
7 of life that goes up to the top of the ice and how -- how
8 they feed each other. We got to know those.

9 You have got to come up and help us to put them
10 in paper and show us why these -- why these bearded seals,
11 seals, polar bears, whales, birds and why are they -- you
12 got to tell us why they are migrating through these areas
13 because they mean a lot for us. Like that gentleman that
14 was sitting here, he lives a subsistence way of living.

15 MS. SHARON WARREN: Those are really good
16 concerns and comments, and we have them in the record, and
17 we will be able to follow up on them.

18 MR. ENOCH OKTOLLIK: All right. I'm glad
19 this gentleman, he will try to bring some people up.

20 MR. MIKE HALLER: We will work with you,
21 Mr. Mayor.

22 MR. FRANK BESTER: When is the -- when is
23 the first production going to take place, I mean, just out
24 of your mind?

25 MS. SHARON WARREN: I don't know. I don't

1 know.

2 MR. FRANK BESTER: So we need to elongate
3 it so you know.

4 MR. ENOCH OKTOLLIK: 2030.

5 MS. SHARON WARREN: I don't know. I mean,
6 we are at the lease sale stage, and so if --

7 MR. FRANK BESTER: And you got to know all
8 these studies and all that.

9 MS. SHARON WARREN: There is a lot that
10 happens before you even get to production, because you
11 have a lease sale, you go through -- the leases have to be
12 affirmed in some manner that you still have leases out
13 there, so that the companies will file an exploration
14 plan, and then the companies will have to go out and
15 explore. I don't know.

16 MR. FRANK BESTER: Slow the oil companies
17 down a little bit.

18 MS. SHARON WARREN: They have to go out
19 and find what they are looking for and they have to find
20 it in quantities that is economical to bring from out in
21 the ocean forward. And then when they -- and if they do
22 find that, then they have to file with us a production
23 plan, and they have to tell us how they are going to
24 produce that oil, how they are going to bring it to shore,
25 what the infrastructure is, what's the mitigation.

1 There is a lot of things that happen, and so
2 there is not a set time frame of, oh, it's going to happen
3 in X amount of years. I don't know. We are -- we are
4 going through this process, and each step of the way there
5 is further environmental review. There is further
6 decisions that are made. So -- and depending on what the
7 environmental review shows and the decisions that are made
8 will depend on the timing of everything. And again, they
9 have to find it. You know, they have to have some --

10 MR. FRANK BESTER: So they're going to
11 slow it down, in other words, huh?

12 MS. SHARON WARREN: Well, it takes time.
13 It takes time. You are out in an area, and we have a
14 government process, a regulatory process that we take
15 seriously when they go through all this and looking at the
16 environmental information that's needed, not only that we
17 need in order to do that, to make sure that any operations
18 that are out there are conducted safely, environmentally
19 safe, and safety is also involved. So I don't have a
20 set -- but you will be -- with that chart it shows you
21 where you can be involved in each step of the way where we
22 will come out and ask you, you know.

23 MR. FRANK BESTER: Where are you at,
24 planning on specific sale or --

25 MS. SHARON WARREN: Yes, we are on the

1 specific sale. So we had to redo -- we -- we published an
2 EIS. We did the notice of sale. We issued the leases.
3 And that's when the Court told us you didn't do your
4 environmental impact statement. He had three concerns.
5 He said, you go back because you missed these points. So
6 we are back, so we did a draft supplemental, revised it;
7 so we did that.

8 So now we are right here. We have a 45-day
9 comment period on it, which closes July 11th, and then the
10 next step will be the final supplemental EIS, and then
11 after that he will make a decision. We don't have that
12 because the sale -- we won't have the final notice of sale
13 because the sale has already taken place. So what he will
14 go to is right to this block that says sale, and he will
15 make a decision whether or not the sale that was held in
16 2008 will stand or if he will make a decision that he
17 wants it configured differently. Okay.

18 So then we are right here. Should any leases
19 remain after his decision and the Court weighs in, should
20 any of those leases remain, then it will go down to the
21 next tier, the pink.

22 And we will start here where there is an
23 exploration plan that will be submitted by the company.
24 We will review it with an environmental assessment if
25 there is no new significant effects. If there are new

1 significant effects that was not taken into consideration
2 with an EIS, then we will be looking at an environmental
3 impact statement.

4 And then they look at the exploration plan for
5 review to make sure it has all the regulatory pieces in
6 it. We were talking about the worst-case discharge. They
7 have to have that in there to explain to us what they are
8 doing. It has to have an oil spill contingency plan. The
9 regulations have -- there is a lot of requirements for the
10 companies to follow before there is approval on any
11 exploration plan. And then the well is drilled, and if
12 there is any other wells.

13 And then after that, you know, the company has
14 the exploration plan, they also have to file an
15 application permit to drill. So even if they have an
16 exploration plan, we usually conditionally approve it
17 because they have to get all the permits. Not only do
18 they have to get permits from us, but they have to get
19 permits from the Environmental Protection Agency. They
20 have to get permits from Fish & Wildlife Service. They
21 have to get permits from the National Marine Fisheries
22 Service. Other federal agencies are involved to issue
23 permits. And once they get those permits from all the
24 federal government, then they can go out and explore.

25 So they may stop here. They may stop here after

1 they explore and find out that, gee, that there is not
2 anything economical that we can bring onto shore at this
3 time.

4 MR. FRANK BESTER: So it's about less than
5 a year for the post sale, right, about there?

6 MS. SHARON WARREN: Shell has filed with
7 us an exploration plan that they want to go out and drill
8 in 2012. So they want to go out next year to drill.

9 MR. FRANK BESTER: A little too early.

10 MS. SHARON WARREN: That's what they want
11 to do. But we have to get through this decision on the
12 lease sale first.

13 MR. LES SEGEVAN: As soon as they start,
14 the better because the revenues are falling. And when the
15 revenues monies start falling, the jobs start declining
16 and there will be -- instead of 60 percent unemployment in
17 our village, it's going to be 80 percent. We need this
18 money. Everybody knows that. Our grandchildren need it.
19 Our great-grandchildren need it. Our village needs it.
20 With everything going on right now with the subsistence
21 animals unexplainably getting sick here and there, it's
22 going to be hard.

23 It takes gas to hunt. It takes money to get an
24 outboard boat. And our young people now today, they are
25 used to money. They grew up with money. They're used to

1 watching TV. They're used to easy life. We need this gas
2 and we need this oil. There is no two ways about it. If
3 there is a way you can do it to keep the subsistence life
4 animals going and oil and gas revenue, if you can do it
5 and keep the subsistence way of our life going, if you can
6 do it, I say you go ahead and do it for the future; not
7 only for us up here, but also for the people in the state
8 of Alaska. That's what we need to do.

9 MR. ENOCH OKTOLLIK: We rely on it, the
10 state of Alaska oil right now, 80 percent, 90 percent of
11 that crude oil.

12 MR. LES SEGEVAN: We need the money now.

13 MS. MARJORIE ANGASHUK: I'm on food
14 stamps, too. I know in Wainwright food is very expensive.
15 When I go to KOC store it's cheaper. And I can't afford
16 to buy meat. It's too much. My family always get hungry
17 for meat, you know, but I can't afford. The supermarket
18 is too small. So we have family that likes to eat. So I
19 turn around and let them eat Inupiat food and maybe cook
20 up. The only thing they like to eat is duck soup. That's
21 their favorite. And you can get the meat and all that.
22 Like I told them, I'm on food stamps and I can't afford
23 them because it's too much. When I went over there, it's
24 cheaper.

25 MS. SHARON WARREN: Thank you.

1 MR. FRANK BESTER: One more question. How
2 much -- if the oil start development, how will Wainwright
3 benefit for that, you know, for, you know, money-wise
4 or --

5 MS. SHARON WARREN: I'm not sure. And so
6 I would have to take that question back. We have it in
7 the record, and I'll have to take that back to give you --

8 MR. FRANK BESTER: That's a big
9 question.

10 MS. SHARON WARREN: -- an accurate answer.
11 And I don't want to answer it off the top of my head and
12 be wrong. I think it needs a correct answer. So --

13 MR. FRANK BESTER: Wainwright needs to be
14 benefited.

15 MR. ENOCH OKTOLLIK: I know the North
16 Slope Borough benefit from it, Frank, the impact money
17 that we are supposed to get for Wainwright. But the North
18 Slope Borough takes that impact money. Some kind of money
19 was issued, impact money, and the North Slope Borough got
20 it and we never -- we are the most impacted community, and
21 we never got the impact money here when we -- what should
22 have been used here in Wainwright for that lease sale --
23 where that lease sale area is at for that Chukchi Sea,
24 anyway.

25 MR. LES SEGEVAN: Yeah, that needs to be

1 corrected.

2 MS. SHARON WARREN: We have your question
3 in the record and concern, and we will make sure that we
4 respond to it so that you can have the answer.

5 MR. FRANK BESTER: We will be sheiks.

6 MS. SHARON WARREN: Is there any more that
7 you would like to say before we close the record? If not,
8 thank you again.

9 MR. FRANK BESTER: Thanks for coming.
10 Thank you very much.

11 (Proceedings adjourned at 9:16 p.m.)
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1 REPORTER'S CERTIFICATE

2 I, MARY A. VAVRIK, RMR, Notary Public in and for
3 the State of Alaska do hereby certify:

4 That the foregoing proceedings were taken before
5 me at the time and place herein set forth; that the
6 proceedings were reported stenographically by me and later
7 transcribed under my direction by computer transcription;
8 that the foregoing is a true record of the proceedings
9 taken at that time; and that I am not a party to nor have
10 I any interest in the outcome of the action herein
11 contained.

12 IN WITNESS WHEREOF, I have hereunto subscribed
13 my hand and affixed my seal this ____ day of
14 _____ 2011.

15
16 _____
17 MARY A. VAVRIK,
18 Registered Merit Reporter
19 Notary Public for Alaska

20 My Commission Expires: November 5, 2012
21
22
23
24
25

Revised Draft SEIS

Comment Letters

Federal Government

Tribal Governments and Alaska Native Organizations

State Government

Local Government

Environmental Organizations

Corporations and Industry Groups

General Public

Federal Government

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 10
 1200 Sixth Avenue, Suite 900
 Seattle, WA 98101-3140



July 8, 2011

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 PUBLIC AFFAIRS

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REGIONAL DIRECTOR, ALASKA OCS
 MINERAL MANAGEMENT SERVICE
 ANCHORAGE, ALASKA

Sharon Warren, Project Manager
 U.S. Department of the Interior
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive Suite 500
 Anchorage, Alaska 99503-5823

Re: EPA comments on the BOEMRE Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska, Revised Supplemental EIS (EPA# 05-049-MMS)

Dear Ms. Warren:

The U.S. Environmental Protection Agency (EPA) has reviewed the Revised Draft Supplemental Environmental Impact Statement (EIS) for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska, (CEQ No. 20110164) in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures we also evaluate the document's adequacy in meeting NEPA requirements.

This EIS was prepared to augment the previous Chukchi Sea Lease Sale 193 EIS prepared in 2008, as well as the Supplemental EIS prepared in 2010 in response to the order from the Alaska District Court to evaluate impacts from natural gas, to determine missing information per 40 CFR 1502.22, and to determine if the costs of obtaining missing information would be exorbitant or unknown. This revised EIS was developed specifically in response to comments from numerous stakeholders requesting that BOEMRE conduct an analysis of a blowout scenario. BOEMRE responded in March 2011 that it would revise the Supplemental EIS to include an analysis of a Very Large Oil Spill (VLOS) scenario.

We commend the BOEMRE for being responsive to the requests to perform such an evaluation and believe the analysis will help inform the public, other stakeholders and the decision-maker of the full range of potential effects from the project. Overall, we believe the Revised Draft Supplemental EIS provides a careful and supportable analysis of a VLOS. While we have serious concerns relating to the potentially significant impacts that would occur to many Arctic resources if such an event were to occur, we recognize that the probability of such an event is very low. We also believe that the additional mitigation measures implemented as a result of the Deepwater Horizon incident, as well as the additional planning and oversight of Outer Continental Shelf activities by BOEMRE will further reduce the potential for such an event. We therefore are assigning the rating of EC-1 (Environmental Concerns-Adequate Information) to the EIS. A copy of the rating system used in conducting our review is enclosed for your reference.

We do offer a few recommendations for incorporation into the Revised Final Supplemental EIS. First, although this is a revision to a supplemental document, we believe that the addition of an Executive Summary would be helpful for readers, particularly for North Slope residents who are trying to balance everyday obligations with reviewing the numerous technical documents for Arctic projects that are constantly being developed. Second, and perhaps as part of the Executive Summary or in the discussion of alternatives in Chapter 2, we recommend that the final EIS incorporate an impact summary table. Such tables provide a useful visual aid to sharply compare the impacts associated with each alternative. Similarly, we recommend that BOEMRE consider incorporating additional figures throughout the text that will aid in visually presenting the information, where applicable. For example, in the discussion of alternatives, it would be helpful to have figures that identify the active leases as well as deferral areas for each alternative. Finally, we recommend that discussions regarding the State of Alaska Coastal Zone Management Program be revised to reflect the current status of that program.

Also, although identified briefly in the current document, with reference to a more detailed discussion in the 2008 Multi-Sale Draft EIS, we believe the responsibilities and activities of the Alaska Regional Response Team (RRT), including the development and implementation of the Arctic Sub-Area Plan, should be updated and emphasized in this document. The partnership of the RRT agencies in planning and actual response is vital to the successful response to an incident in the Arctic, especially in the VLOS scenario.

We appreciate the opportunity to review the Revised Draft Supplemental EIS. Should you have any questions regarding our comments please contact me at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov or contact Jennifer Curtis of my staff in Anchorage at (907) 271-6324 or by electronic mail at curtis.jennifer@epa.gov.

Sincerely,

Christine B. Reichgott, Manager
 Environmental Review and Sediments Management Unit

Enclosure

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U.S. Environmental Protection Agency Rating System for
 Draft Environmental Impact Statements
 Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

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Tribal Governments and Alaska Native Organizations



Alaska Eskimo Whaling Commission

P.O. Box 570 • Barrow, Alaska 99723
(907) 852-2392 • Fax: (907) 852-2303 • Toll Free: 1-800-478-2392

July 11, 2011

Via Web Portal

Dr. James Kendall,
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Dr. Ste. 500
Anchorage, Alaska 99503-5820
<http://www.regulations.gov/#documentDetail;D=BOEM-2011-0044-0001>

Re: Comments on the Chukchi Sea Planning Area Oil and Gas Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement (76 Fed. Reg. 30956 (May 27, 2011)).

Dear Dr. Kendall,

Thank you for the opportunity to provide input on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193. These comments are submitted on behalf of the Alaska Eskimo Whaling Commission (AEWC). The AEWC represents the eleven bowhead whale subsistence hunting villages of Barrow, Nauyasut, Kaktovik, Point Hope, Wainwright, Kivalina, Wales, Savoonga, Gambel, Little Diomed, and Point Lay. Our villages rely on the living resources of the Beaufort and Chukchi Seas for the majority of our food and for the continuation of our subsistence society and culture.

The AEWC was formed by the whaling captains of our constituent villages in 1980, for the purpose of protecting our bowhead whale resource and subsistence hunt. We carry out our responsibilities through locally delegated tribal authority and through federal authority delegated pursuant to the NOAA-AEWC Cooperative Agreement. Alaskan Native subsistence takes of marine mammals are exempt from the Marine Mammal Protection Act's (MMPA) moratorium on the take of marine mammals. 16 U.S.C. § 1371(b)(1). In addition, Congress has given our subsistence livelihood priority over other uses of the marine environment, requiring that other users mitigate the impacts of any activities with the potential to adversely affect the availability of our subsistence resources. 16 U.S.C. §§ 1371(b), (a)(5)(A)(i)(I) and (a)(5)(D)(i)(II).

1

Our communities potentially face very significant impacts from oil and gas exploration and development in the Chukchi Sea. Therefore, the AEWC must insist that BOEMRE undertake careful review and thorough analysis of potential impacts from the proposed lease sale, and that the agency ensure that all impacts with the potential to affect the availability of our subsistence resources be mitigated properly under the terms of the MMPA.

Last fall, we submitted comments on the first Supplemental Draft Environmental Impact Statement (SDEIS) and we incorporate those comments by reference. We thank BOEMRE for updating information in the revised SEIS, especially on bowhead whales. The summary of new scientific information on the extensive use of the lease sale area by bowhead whales is a good start. However, the agency also needs to consider fall bowhead whale subsistence hunting in the Chukchi Sea and the movement to winter hunting at St. Lawrence Island, and to carry the new information on bowhead whale use of the Chukchi and fall and winter subsistence hunting into the agency's analysis of the impacts of the proposed action. Indeed, the revised SEIS still concludes that impacts to the western arctic stock of bowhead whales will be negligible or short-term despite the new information. SEIS at 28.

Additionally, the AEWC strongly disagrees with the continued assumption in the revised SEIS that our villages can sustain up to two years of a potentially serious reduction in food supply without experiencing a significant impact from development. The loss of hunting opportunities for even a single season can place severe hardships on our communities. Thus, the International Whaling Commission and other US government agencies have recognized that bowhead whales and other marine mammals are critical to meeting our cultural and nutritional needs. BOEMRE's current unsupported assumption remains an unacceptable threshold against which to measure impacts to our communities, as it places 100 percent of the risk of arctic offshore development on our communities and our food supply. We ask that BOEMRE use the following threshold instead in its analysis: **The impact of an activity is considered to be significant when the activity will reduce the availability of a subsistence species to a level insufficient for a harvest to meet subsistence needs.** This standard is consistent with the Marine Mammal Protection Act's (MMPA)'s "no unmitigable adverse impact" standard and with the International Whaling Commission's recognition of the level of our communities' annual need for bowhead whales.

BOEMRE supports its recommended alternative by asserting that impacts to our subsistence livelihood will be addressed through "conflict avoidance measures." Yet BOEMRE does not require that lessees adhere to the Open Water Season Conflict Avoidance Agreement (CAA), which contains negotiated and reasonable stipulations for avoiding impacts to subsistence communities. The AEWC requests that BOEMRE require that oil companies enter into negotiations with the AEWC, acting on behalf of our eleven bowhead whale subsistence hunting communities, on mitigation measures to ensure that those measures are operationally appropriate for both hunters and operators. In addition, the AEWC requests that BOEMRE adopt measures already agreed to through the CAA negotiation process.

2

I. SUMMARY OF THE COMMENTS

The Regulatory Framework Needs to Include MMPA Requirements in the Analysis of Significant Impacts. The Marine Mammal Protection Act (MMPA) requires that the proposed action does not result in unmitigable adverse impacts on the availability of the bowhead whale for subsistence hunting. 16 U.S.C. §§ 1371(a)(5)(A)(i)(I), (D)(i)(II). BOEMRE should be more explicit about the requirements of the MMPA that apply to the proposed action and should then assess potential impacts against these requirements.

New Alternatives Must Result in Substantially Different Environmental Impacts to Subsistence Hunting and the Bowhead Whale. Because the revised SEIS fails to develop distinct alternatives with different impacts to resources, it is important that the SEIS is revised to include alternatives that incorporate time and area restrictions and other measures that have been developed through the CAA negotiation process, as well as requirements for ongoing negotiated mitigation measures to address potential adverse impacts to the availability of marine mammal resources.

The Agency Needs to Provide Detailed Mitigation Measures and Lease Sale Stipulations. Specific mitigation measures must be put forth to ensure protection of subsistence hunting. The AEWC believes that an annual process for developing mitigation measures through direct negotiations between hunters and operators, as occurs with the CAA process, should be considered the cornerstone of any arctic development and mitigation plan. Lease sale stipulations can also be a catalyst for such agreements. The need for additional mitigation measures and lease sale stipulations cannot be avoided by concluding that other environmental laws will mitigate impacts.

The Agency Needs to Revise Its Information Regarding the Fall Subsistence Hunt in the Chukchi Sea and Include Reference to Winter Hunting at St. Lawrence Island. The revised SEIS demonstrates a lack of information regarding our communities' use of the area. Fall subsistence hunting in Wainwright, Pt. Lay and Pt. Hope were not included within the SEIS's analysis, nor was winter bowhead subsistence whaling at St. Lawrence Island.

The Significance Thresholds Must Align with the MMPA and Other Applicable Laws. The current significance thresholds in the revised SEIS allow for violations of federal law, specifically the MMPA. The Council of Environmental Quality (CEQ) regulations implementing NEPA specify that even possible legal violations are significant, 40 C.F.R. § 1508.27. As a result, revised thresholds must be developed that do not require violations of federal law before an impact is deemed "significant."

The SEIS Needs to Analyze Impacts to the Bowhead Whale and Subsistence Hunting in Light of the New Information. BOEMRE now has more information regarding the migratory patterns of bowheads, and must incorporate that information into its analysis regarding the impacts to whales from geophysical operations, anthropogenic noise sources, and vessel strikes.

3

The Very Large Oil Spill (VLOS) Analysis of Impacts to Bowhead Whales Must Demonstrate Appropriate Recovery Responses and Provide an Explanation of Long- and Short-term Impacts. To date there has been no successful demonstration of oil spill containment and cleanup technology in the Arctic, a fact that should be clearly acknowledged in the SEIS. In addition, it is essential to understand how impacts to subsistence use and marine mammal populations will be mitigated throughout clean-up and afterward to preserve subsistence hunting opportunities (as required by the MMPA) and maintain current bowhead whale and other marine mammal populations. The analysis needs to discuss the risks and difficulties of same season relief well drilling and assess alternative means of containing a blowout to address the unique problems posed by the Arctic environment, including sea ice, severe weather, cold, and darkness. In addition, the analysis needs to assess realistic oil spill containment and cleanup alternatives that address Arctic conditions. The analysis in the revised SEIS requires greater detail and discussion of how response impacts will be mitigated.

The VLOS Analysis Needs to Address Possible Impacts to Subsistence Hunting in Greater Depth. Our communities face many long-term impacts in the event of a VLOS. The SEIS needs to address how the decision-maker is weighing the risk to Inupiat, and how BOEMRE can justify forcing the communities to take this risk.

BOEMRE Must Properly Assess the Potential Cumulative Impacts to Subsistence Hunting and the Bowhead Whale. The analysis of cumulative impacts must include reasonably foreseeable activity that may affect resources, including oil and gas exploration and production within the Canadian Beaufort and Eastern Russia. Such actions must also be considered in the context of climate change and ocean acidification.

II. THE REGULATORY FRAMEWORK NEEDS TO INCLUDE MMPA REQUIREMENTS IN THE ANALYSIS OF SIGNIFICANT IMPACTS IN LIGHT OF THE NEW BACKGROUND INFORMATION.

We are pleased to note that BOEMRE mentions the significance of the MMPA in protecting the subsistence hunt of Inupiat communities. However, the revised SEIS fails to apply the MMPA requirements to its analysis of significant impacts to subsistence hunting. By ignoring the regulatory framework developed through the MMPA in its analysis and failing to take a hard look at and incorporate the new information included in the background section, these deficiencies allow for illegal takes of the bowhead whale and illegal interference with the availability of bowhead whales for subsistence use. The agency should be more explicit about the requirements of the MMPA that apply to the proposed action, and should then assess potential impacts against these requirements. By failing to do so the SEIS is not in compliance with the law and CEQ regulations, and a large risk is placed upon our communities by ignoring the MMPA requirements.

AEWC requests that BOEMRE specifically identify how mitigation will reduce impacts to a level that does not violate MMPA requirements. The revised SEIS must explain how the proposed action:

(I) will have a negligible impact on such species or stock, and

4

(II) will not have an unmitigable adverse impact on the availability of such species or stock for taking for subsistence uses

16 U.S.C. §§ 1371(a)(5)(A)(i), (D)(i). Although these requirements are mentioned, the agency needs to present a sufficient analysis that explains how the proposed action will avoid running afoul of these requirements.

In light of the new information regarding bowhead whale migratory patterns, it is essential that the agency take a hard look at this information and incorporate it into its analysis of possible violations of the MMPA. Every EIS must take a "hard look" at the environmental consequences of its proposed action. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1211 (9th Cir. 1998). An EIS must discuss the steps that will be taken to reduce impacts to subsistence hunting, and not just state in a conclusory fashion that the MMPA will prevent significant impacts. Outlining these steps ensures that the agency adequately reviews the scientific data regarding bowhead whales and subsistence hunting, identifies possible impacts from the proposed action and alternatives, and makes a reasoned decision based on applicable law.

A. The Agency Needs to Analyze the Impacts of Seismic and Other Geophysical Activity on Subsistence Hunting Within the Framework of the MMPA.

The agency must demonstrate how the seismic activity resulting from the proposed action will comply with MMPA requirements. Any action that results in unmitigable adverse impacts to subsistence hunting violates the MMPA. 16 U.S.C. §§ 1371(a)(5)(A)(i)(II), (D)(i)(II). The SEIS concludes that seismic activity would

result in no more than temporary adverse effects and less than stock-level effects. Seismic surveys, especially as mitigated under MMPA authorizations are not expected to add significantly to the cumulative impacts on bowhead whales from past, present and future activities.

SEIS at 291. Such a conclusory statement does little to demonstrate how the proposed action will comply with the MMPA. This is especially true because a "temporary" adverse effect that results in the loss of a season's hunting opportunity for a community would be significant. The revised SEIS inexplicably and improperly concludes that if an effect is temporary, then it cannot be significant. Further, a stock-level reduction is not the correct level at which to judge impacts, since the deflection of bowhead whales from their migratory path due to the proposed action could lead to significant adverse impacts on a community's subsistence hunt.

Moreover, the AEWK notes the existence of information demonstrating that seismic activity can significantly harass the bowhead whale. NOAA's Under Secretary Lubchenko stated that "[u]nderwater noise associated with oil and gas leasing, such as seismic and drilling noise, represents a significant source of potential harassment for marine mammals."¹ Because of

¹ Jane Lubchenko, Comments on the U.S. Department of the Interior Minerals Management Service Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015 National Oceanic and Atmospheric

the potential detrimental effects to the bowhead whale and subsistence hunting due to seismic activity, the agency is taking a known risk that, unless mitigated through lease stipulations or a CAA, places the burden of the adverse impact on our communities who depend on subsistence hunting instead of the lessees. Therefore, it is essential that BOEMRE sufficiently analyze the effects of seismic activity on the subsistence hunt in light of MMPA requirements and not just state that significant impacts will not occur due to mitigation under MMPA requirements.

B. MMPA Requirements Need to be Incorporated Into the Analysis of an Oil Spill's Impact to Bowhead Whales.

The AEWK requests that the agency perform a more thorough analysis of the impacts to bowhead whales resulting from an oil spill by addressing MMPA requirements. The MMPA requires mitigation efforts to demonstrate how an oil spill will not result in take of the bowhead whale. BOEMRE states that in the event of a large oil spill, biological resources may experience significant adverse impacts: "Most biological resources contacted by oil are expected to recover within two to three generations." SEIS at 287.

If the agency allows the project to go forward under the revised SEIS, there is the potential for a major threat to the bowhead whale and local subsistence communities, depending on the level of depletion, since bowhead whales have a lower potential rate of recovery than most other large whale species. Therefore, the SEIS needs to examine more carefully the possible effects of a large oil spill on bowhead whale populations.

The AEWK notes, as well, the great frequency with which bowhead whales are discussed in Appendix A, along with the information that is not known about them. See Appendix A at A6, A7, A17, A18, A20, A21, A22, A23, A24, A46, A55, A56, A57, A58, A60, A61, A82, A83, A86, A87, A88, A89, A90, A91, A92, A93, A97. The AEWK hopes BOEMRE revisits this analysis with respect to the Inupiat's dependence on the bowhead whale and includes an analysis of how the lease sale comports with the MMPA's requirements.

III. NEW ALTERNATIVES MUST BE INCLUDED IN THE REVISED SEIS TO ADDRESS THE ENVIRONMENTAL IMPACTS TO SUBSISTENCE HUNTING AND THE BOWHEAD WHALE.

The AEWK asks BOEMRE to propose new alternatives, including time and area restrictions, entering into an annual process for the negotiated development of mitigation measures, and entering into an oil spill contingency mitigation agreement that provides immediate access to alternative hunting opportunities, as measures that could mitigate the adverse impacts from oil and gas activities in the proposed lease sale area on bowhead whales and subsistence hunting as required by law. A reasonable range of alternatives with varied environmental impacts is necessary to enable the decision-maker to make an informed choice among the project alternatives.

Administration U.S. Department of Commerce (September 21, 2009). Available at http://www.nmfs.noaa.gov/ocs/mfmc/meetings/2010_06/docs/noaa_final_comments_nmfs_5year_plan_092109.pdf

The agency's conclusion about the similarity of the impacts among the existing alternatives in the SEIS, SEIS at 31-39; SEIS at 286 (all alternatives have similar impacts to bowhead whales), ignores the import of the alternatives analysis, which NEPA regulations describe, "as the 'heart' of the EIS." *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1120 (9th Cir. 2002). If all the alternatives have similar environmental consequences, then BOEMRE has failed to present a reasonable range of alternatives. *Id.* Because of the importance of alternatives in the NEPA process, BOEMRE needs to reconsider its current alternatives, and include alternatives that will address impacts to bowhead whales and protect subsistence hunting.

The AEWK proposes an alternative that includes the following mitigation measures, which have been negotiated directly between the AEWK, on behalf of our subsistence whale hunters, and offshore operators:

GENERAL PROVISIONS FOR AVOIDING INTERFERENCE WITH BOWHEAD WHALES OR SUBSISTENCE WHALE HUNTING ACTIVITIES.²

(a) Routing Vessels and Aircraft.

(1) All vessel and aircraft routes shall be planned so as to minimize any potential conflict with bowhead whales or bowhead subsistence whaling activities. All vessels shall avoid areas of active or anticipated whaling activity (as reported pursuant to Section 202).

(2) Beaufort Sea. Vessels transiting east of Bullen Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.

(3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at least five (5) miles offshore during transit.

(b) Aircraft Altitude Floor and Flight Path.

(1) AIRCRAFT SHALL NOT OPERATE BELOW 1500 FEET unless the aircraft is engaged in marine mammal monitoring, approaching, landing or taking off, or unless engaged in providing assistance to a whaler or in poor weather (low ceilings) or any other emergency situations. Aircraft engaged in marine mammal monitoring shall not operate below 1500 feet in areas of active whaling, such areas to be identified through communications with the Com-Centers.

(2) Except for airplanes engaged in marine mammal monitoring, aircraft shall use a flight path that keeps the aircraft at least five (5) miles inland until the aircraft is directly south of its offshore destination, then at that point it shall fly directly north to its destination.

(c) Vessel Speeds.

Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whalers

² 2011 Open Water Season Programmatic Conflict Avoidance Agreement (CAA), Section 501. See Attachment 1 for the full text of the 2011 CAA. Note that only one signature appears on this document, other signatures have been provided separately.

unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(d) Vessels Operating in Proximity of Bowhead Whales.

If any vessel inadvertently approaches within 1.6 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whalers or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:

(1) reducing vessel speed to less than 5 knots within 900 feet of the whale(s);

(2) steering around the whale(s) if possible;

(3) operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;

(4) operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and

(5) checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.

GEOPHYSICAL ACTIVITY LIMITATIONS³

The following operating limitations are to be observed. [Lessees]⁴ conducting geophysical activity [shall]⁵ coordinate the timing and location of such activity so as to reduce, by the greatest extent reasonably possible, the level of noise energy entering the water from such activity at any given time and at any given location.

In addition, all geophysical activity in the Chukchi Sea shall be conducted in accordance with the terms set forth below.

(1) Beginning September 15, and ending with the close of the fall bowhead whale hunt, if Wainwright, Pt. Lay, or Pt. Hope intend to whale in the Chukchi Sea, no more than two geophysical activities employing geophysical equipment will occur at any one time in the Chukchi Sea. During the fall bowhead whale hunt, geophysical equipment will not be used by [Lessees]⁶ within 30 miles of any point along the Chukchi Sea coast. [Lessees]⁷ will contact the Whaling Captains' Associations of each of those villages to determine if a village is prepared to whale and will notify the AEWK of any response.

³ *Id.* § 502.

⁴ Original text refers to "the Industry Participants"

⁵ Original text uses "agree to."

⁶ Original text refers to "Participants."

⁷ Original text refers to "Industry Participants."

(2) Safe harbor will be at sites selected by [a Lessee]⁹ and the AEWC. Safe harbor sites will be agreed upon no later than the beginning of operations. However, a vessel captain will seek safety for his assets (vessel and personnel) as is his duty under the Law of the Sea.

To ensure compliance with current environmental laws, and to provide a template for implementing successful mitigation measures, the AEWC also proposes that the alternative require lessees to negotiate directly, on an annual basis, with the AEWC, acting on behalf of and in consultation with its bowhead whale subsistence hunters, to develop additional mitigation measures that might be necessary in light of changed operational, hunting, or environmental conditions. Implementation of such an alternative demonstrates to the AEWC that BOEMRE acknowledges subsistence communities' dependence on local resources, and the vulnerability our communities face if the proposed action occurs.

IV. THE AGENCY NEEDS TO PROVIDE SUFFICIENT MITIGATION MEASURES AND LEASE SALE STIPULATIONS IN THE SEIS.

NEPA requires that an agency include a discussion of mitigation measures in an environmental impact statement. 40 C.F.R. §§ 1502.14(f), 1502.16(h). NEPA regulations explain that "mitigation" includes:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.20. The Supreme Court has made clear that:

omission of a reasonably complete discussion of possible mitigation measures would undermine the "action-forcing" function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989).

A. The Mitigation Measures in the Revised SEIS Need to Provide for Specific Mechanisms to Ensure Protection of Subsistence Hunting.

NEPA requires specificity in mitigation measures and BOEMRE cannot simply defer details of mitigation measures to a future date. 40 C.F.R. § 1508.27. BOEMRE should be doing

⁸ Original text refers to "the Industry Participants."

an up-front analysis of the specific mitigation measures so the decision-maker knows whether practical, workable solutions exist prior to making a decision on the lease sale. Such an analysis ensures that environmental consequences have been fairly evaluated. *Methow*, 490 U.S. at 352. By providing statements that mitigation measures *in general* will reduce any substantial impact faced by the bowhead whale and subsistence hunters, the agency fails to provide sufficient details as required by law. For example, after determining that risks exist, BOEMRE simply describes mitigation measures such as "conflict avoidance mechanisms" and "measures to minimize effects." SEIS at 16. Use of such vague terminology provides no analysis or information to address how these measures will mitigate the risk and fails to supply the requisite reasonably complete discussion.

B. If the Agency Depends on Other Laws as Mitigation Measures, It Must Disclose How Such Laws Will Reduce Impacts.

When mitigation measures refer to other laws as a means of reducing an impact's significance, the agency must demonstrate how such other laws result in successful mitigation, and provide for a process for such mitigation measures to be implemented.

For example, the SEIS assumes that air emissions will be mitigated by the Clean Air Act and its requirement that permittees undertake a Best Available Control Technology (BACT) review. However, at least one company, ConocoPhillips, that purchased lease blocks in the Lease Sale 193 sale has only applied for a minor source air permit (and not a major source air permit). Therefore, for ConocoPhillips' air permit no BACT analysis will be undertaken. If BOEMRE is relying upon such an analysis and use of technology to mitigate the impacts from its lease sale, then it needs to make it clear that such an analysis is a required mitigation measure.

As this example illustrates assumed compliance with federal law in-and-of-itself does not necessarily mitigate potentially adverse environmental impacts. Thus, if significant impacts may result from the proposed action, it is essential that the revised SEIS disclose how mitigation measures will be carried out and enforced so that oil and gas companies can abide by them in the future. The purpose of providing mitigation measures is to demonstrate the steps the agency will take to prevent significant impacts, which demands that the agency explain how those measures will be carried out and made enforceable (and not just generally conclude that such actions will not violate applicable laws).

In addition, as the SEIS discloses, "there are concerns about the effectiveness of mitigation measures being used in the Arctic." SEIS at 290 (citing Expert Review Panel 2010). In response to these concerns, the subsequent 2011 Expert Review Panel report gives guidance on how to properly construct and report mitigation data, a requirement that is missing from the SEIS.⁹ The AEWC recommends that BOEMRE use the guidelines set out in the 2011 report to help mitigate the impacts of the lease sale.

C. The SEIS Needs to Identify How Lease Sale Stipulations Will Mitigate Impacts.

⁹ Available at http://www.nmfs.noaa.gov/pr/pdfs/permits/openwater/peer_review_report2011.pdf

Lease sale stipulations are a powerful tool that can prevent and mitigate harmful impacts. Unfortunately, the SEIS fails to present any new lease sale stipulations that can be enforced at later stages of the Outer Continental Shelf Lands Act process.

AEWC asks that the revised SEIS provide new, reasonable and specific lease stipulations that address: the use of the sale area by bowhead whales; what will happen in the event of a very large oil spill; and how oil and gas companies will mitigate their impact on subsistence hunting by Alaska Natives. Above all else, the AEWC requests that the lease sale contain a stipulation requiring lessees to negotiate directly with the AEWC, on an annual basis for the purpose of developing mitigation measures necessary to protect subsistence uses, consistent with the standards set forth in the MMPA at Section 101 (a)(5)(A) and (D). The AEWC also requests that BOEMRE institute a lease sale stipulation requiring an oil spill mitigation agreement to provide immediate access to alternative hunting opportunities in the event of a spill.¹⁰

V. THE AGENCY NEEDS TO REVISE ITS INFORMATION REGARDING THE FALL SUBSISTENCE HUNT IN THE CHUKCHI SEA; WINTER WHALE HUNTING AT ST. LAWRENCE ISLAND REQUIRES THAT INDUSTRY VESSELS LEAVE THE CHUKCHI SEA NO LATER THAN NOVEMBER 1.

BOEMRE does not acknowledge the fall bowhead whale hunts in the Chukchi for the communities of Wainwright, Point Hope, and Point Lay. SEIS at 70-71. These subsistence hunts must be included in the analysis. By failing to identify these communities' fall hunts, BOEMRE cannot perform a sufficient analysis as to alternatives and mitigation measures. The AEWC requests that BOEMRE revise the SEIS to include all available information as to subsistence communities' fall hunts.

Similarly, BOEMRE has not included a discussion of the winter (late November through March) bowhead whale hunting at St. Lawrence Island. The timing of this hunt is significant since industry vessels leaving the high Arctic after the end of October travel through the Bering Strait just as winter whale hunting is getting underway at St. Lawrence Island.

The agency should also look to local traditional knowledge (LTK) of the Inupiat subsistence communities to develop a cohesive understanding of our cultural dependence and innate understanding of the natural resources along the Chukchi Coast. LTK has become an increasingly prominent tool for understanding the delicate nature of local resources in conjunction with traditional scientific research.¹¹ A focus on the LTK of our communities will allow the agency to synthesize static research with human observation and result in better information to judge the potential impact of the Proposed Action.

¹⁰ See Attachment 2 for the text of the Oil Spill Mitigation Agreement required of drilling operators under the terms of the CAA.

¹¹ DeGange, Anthony R., and Lyman Thorsteinson, Chapter 3. Ecological and Subsistence Context, in Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011. *An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska*. U.S. Geological Survey Circular 1370, p. 72. Available at <http://pubs.usgs.gov/circ/1370/pdf/circ1370.pdf>

VI. THE SIGNIFICANCE THRESHOLDS MUST ALIGN WITH THE MMPA AND OTHER APPLICABLE LAWS.

A. The SEIS Needs to Incorporate MMPA Requirements in its Definition of "Significant Impacts" to Subsistence Harvest.

We strongly encourage BOEMRE to analyze the significance of potential impacts to subsistence hunting activities according to the mandated criteria set forth in the CEQ regulations at 40 C.F.R. § 1508.27. The CEQ regulations require that the term "significantly" be defined by the context and intensity of impact. *Id.* BOEMRE has taken the position that federal leasing and permitting in the Arctic Ocean could deprive Northern Alaskan coastal communities of important subsistence resources, including bowhead whales, for up to two years before these federal actions would be considered significant. SEIS at 75. The AEWC strongly disagrees with this position. The International Whaling Commission recognizes a need by the AEWC villages for 67 landed bowhead whales per year. IWC Schedule, par. 13(b)(i). Significance Thresholds must be developed that respect this need.

In the context of interference with the bowhead whale subsistence hunt, BOEMRE should acknowledge the documented annual need of North Slope villages for bowhead whales and place heightened emphasis on whether proposed activities may violate the "no unmitigable adverse impact" standard in section 101(a)(5)(A) and (D) of the MMPA when defining and evaluating significance. 16 U.S.C. §§ 1371(a)(5)(A), (D). Congress has spoken directly to this issue and implemented safeguards designed specifically to protect the subsistence activities of Alaska Natives, 16 U.S.C. §§ 1371(b), (a)(5)(A)(i)(I), (D)(i)(II), and CEQ's regulations require that BOEMRE consider potential violations of federal environmental laws when determining significance. 40 C.F.R. § 1508.27(b)(10).

The significance thresholds also unlawfully stress only impacts of a long duration. SEIS at 75. NEPA regulations stress that the context for significance includes "[b]oth short- and long-term effects." 40 C.F.R. § 1508.27(a). BOEMRE cannot legally approve short-term disturbances under the theory that a subsistence harvest and whale populations will recover at some point in the future. Instead, the agency must manage offshore activities so that subsistence opportunities during each and every harvest season are protected from unmitigable adverse impacts due to activities that the agency authorized.

The AEWC recommends that BOEMRE adopt the following as a significance threshold: when the activity will reduce the availability of a subsistence species to a level insufficient for a harvest to meet subsistence needs. This definition comports with the MMPA implementing regulations that prohibit activities that would "reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs." 50 C.F.R. § 216.103.

B. The Significance Threshold for Biological Resources Violates Federal Law.

BOEMRE defines a "significant effect" on biological resources as an adverse impact that results in a decline in abundance and or change in distribution requiring three or more generations for the indicated population to recover to its former status. SEIS at 75. Significance

thresholds are set for impacts to water, air and other resources, SEIS at 74-75, that would have catastrophic consequences for our people, culture, and the environment upon which we depend.

BOEMRE must set significance thresholds that comport with applicable environmental laws instead of significance thresholds that assume major violations of statutes such as the Clean Water Act, Clean Air Act, and the MMPA. In essence what BOEMRE has done here is assume that activities can be conducted in violation of numerous environmental laws without causing significant impacts. This practice is not supported by the CEQ's definition of significance. 40 C.F.R. § 1508.27(b)(10).

VII. THE SEIS NEEDS TO ANALYZE IMPACTS TO THE BOWHEAD WHALE IN GREATER DETAIL.

A. The Agency Must Revisit its Analysis of the Impact of Vessel Strikes to the Bowhead Whale.

The revised SEIS fails to sufficiently address the probability of vessel strikes and analyze the threat to the bowhead whale. This is an especially critical issue for fall migrating bowhead whales and other marine mammals moving through the Bering Strait as sea ice forms from north to south in the Chukchi Sea. In recent years, oil and gas vessel movement out of the high Arctic and through the Bering Strait has coincided at times with this southern migration. As vessel traffic increases, the risk of ship strikes will increase in this choke point. AEW whaling captains from St. Lawrence Island, whose winter bowhead whale subsistence hunting can be disturbed by the vessel transit, have sought to address the issue of whale-vessel interaction by asking that offshore operators undertake transit out of the Chukchi Sea lease sale area no later than November 1.

Additionally, the analysis needs to discuss how much vessel traffic will increase due to the proposed action and the likelihood and amount of additional vessel traffic occurring in the lease sale area. The SEIS should include an analysis of impacts to the bowhead whale from deflection from these vessels. Further, BOEMRE needs to provide specific mitigation measures that address the threat to bowheads since researchers "see increased shipping and oil and gas activities as likely to increase pollution, noise and ship strikes to whales." SEIS at 297.

The agency lacks substantial support for its conclusion that "[a]t present, available data does not suggest that strikes of bowheads by oil and gas-related vessels will become an important source of injury or mortality." SEIS at 95. Also, the agency erroneously assumes that impacts will only be temporary and non-lethal. SEIS at 23. On the contrary, scientific studies demonstrate otherwise. Especially in the cumulative context, vessel strikes may have significant impacts to the bowhead whales, especially in light of the changing climate and likelihood of increased vessel traffic in the Chukchi Sea. Increased vessel traffic poses a serious risk to bowhead whales. A recent USGS report states:

Once sea-ice melting begins in the spring, the fraction of the Arctic Ocean covered by low-level clouds and fog rapidly increases from 20 to more than 65 percent. These low

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clouds can drastically reduce visibility, affecting ship and aircraft operations. . . . AOGCMs consistently project that the Arctic will become cloudier by mid-century.¹²

BOEMRE needs to demonstrate how it will successfully curtail adverse impacts to the bowhead due to increasing traffic and reduced visibility. This can be done through mitigation measures including time and area restrictions and limits on the amount of vessel traffic, which will also aid in ensuring compliance with MMPA requirements.

With the agency's unsupported conclusion that vessel strikes will not be an important source of injury or mortality, and scientific studies indicating otherwise, it is essential that BOEMRE undertake a more thorough analysis of the impacts from vessel traffic on bowhead whales.

B. The Agency Must Disclose that it Lacks Information Regarding the Impact of Noise to Bowhead Whales and Subsistence Hunting.

BOEMRE discloses a salient risk to subsistence hunting:

Access to subsistence resources and subsistence-hunting areas could change if cumulative noise and traffic disturbance reduces the availability of resources or alters distribution patterns. Subsistence-harvest activities could be disrupted occasionally by vessel and air traffic. [] Because the bowhead whale harvest in all communities tends to be quite small - one to two whales per year -- noise disturbance from icebreakers and other vessels could cause this small harvest to become locally unavailable for an entire season.

SEIS at 296. BOEMRE concludes that no significant adverse impacts will occur, even though the proposed action could ruin a harvest for an entire community. The agency erroneously qualifies its finding of no impact by stating that "[r]equired protective mitigation is expected to reduce these noise disturbance impacts." *Id.*

If the agency proposes to rely upon future actions to provide the mitigation measures necessary to ensure that bowhead whales remain available for subsistence harvest, as required by the MMPA, it is important to provide substantive direction regarding the nature of these mitigation measures. As noted previously in these comments, the long-standing Conflict Avoidance Agreement process has produced a number of negotiated mitigation measures that are mutually agreeable to both hunters and operators. In addition, the availability of this annual negotiation process offers a means of addressing new mitigation needs as they arise, whether as a result of new or different offshore operations or due to changing use patterns resulting from the effects of climate change.

¹² Clow, Gary D., Anthony R. DeGange, Dirk V. Derksen, and Christian E. Zimmerman DeGange, Anthony R. and Lyman Thorsteinson, Chapter 3. Climate Change Considerations, in Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, *An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska*, U.S. Geological Survey Circular 1370, p. 87. Available at <http://pubs.usgs.gov/circ/1370/pdf/circ1370.pdf>

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In addition, the revised SEIS needs to disclose the information that is lacking to understand these impacts on bowhead breeding, feeding, and migration habits. For example, after demonstrating that bowhead whales may exist within the lease area year-round, the agency concludes that additional information on bowhead presence in the western Beaufort Sea and the northeastern Chukchi Sea is not essential to a reasoned choice among lease sale alternatives. SEIS at 183. The agency assumes that it obtained enough information to make a finding of no significant impact. But in regards to noise, the SEIS states that

noise impacts on cetaceans can range from behavior change (avoidance response, altered travel routes, etc.) to physical harm such as hearing loss, the latter of which can result (in serious cases) in an inability to communicate, detect and/or echolocate. Sometimes even relatively low levels of noise not directly harmful to a whale itself can "mask" naturally-occurring noises upon which whales rely in order to perform basic functions such as communication, echolocation, and feeding.

SEIS at 95. These potentially population-level impacts require full identification and careful analysis, based on empirical research.

VIII. THE VLOS ANALYSIS REQUIRES ADDITIONAL DETAILS AND ANALYSIS OF IMPACTS TO BOWHEAD WHALES AND SUBSISTENCE COMMUNITIES.

A. The Analysis of VLOS Impacts to Bowhead Whales must Identify the Long-term Implications of Such an Event and Acknowledge Where Information is Lacking.

The AEW is pleased to note the inclusion of a very large oil spill (VLOS) impact analysis. Unfortunately, the depth in which the analysis considers impacts to bowheads is cursory at best. For example, the revised SEIS notes that "in some cases cetaceans may require three or more generations coincident with restored and unaffected habitat to restore distribution and populations" after a very large oil spill. SEIS at 181. What are the circumstances under which whales will require three or more generations to recover? Where will restored and unaffected habitat exist? If this information is not known, then how may BOEMRE make a decision? We hope to see a clear recognition that significant impacts to bowhead whales may occur and a detailed discussion of those impacts so the decision-maker can make a reasonable choice.

In light of the inherent risk of a VLOS, the agency should establish specific requirements to allow for prompt recovery action. Requirements that ensure adequate containment of a spill and that allow for drilling of a same-season relief well would promote quick recovery and reduce risks to the spring lead system. The revised SEIS also needs sufficient analysis of the impacts and necessary recovery actions needed to respond to a VLOS. The agency provides that, "[i]n all cases long-term recovery to pre-spill abundance, distribution, and productivity is likely, but the recovery period would be variable and require access to unaffected/restored habitat during the period of recovery." SEIS at 180. The revised SEIS needs to discuss the timeframe necessary for recovery, and how long-term recovery processes would guarantee the revitalization of current subsistence-level bowhead whale populations.

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B. The VLOS Analysis Needs to Address the Possible Impacts to Subsistence Communities in Greater Depth.

Our communities face a significant risk in the event of a VLOS. With our nutritional and cultural dependence on the bowhead whale, a spill that prevents use of traditional hunting grounds or leads to bioaccumulation of toxins in the marine mammals upon which we depend will have very significant adverse and far-reaching impacts to our communities. The AEW asks that the revised SEIS analyze the impacts to subsistence hunting taking into account that the MMPA precludes activity that "reduce[s] the availability of the species to a level insufficient for a harvest to meet subsistence needs." 50 C.F.R. § 216.103.

Because of the possibility of catastrophic impacts to the bowhead whale and subsistence hunting in the event of a VLOS, the AEW asks for binding commitments from the lessees. As mentioned above, we request that BOEMRE require lessees to enter into negotiated mitigation agreements with the AEW, acting on behalf of our hunters, and to agree to oil spill contingency mechanisms to reduce and mitigate any foreseeable impacts to the livelihood of our communities. We also support requiring lessees to demonstrate they can sufficiently contain an oil spill and drill same-season relief wells or cease drilling when a same season relief well can no longer be drilled. These requirements will allow for an effective response to a spill that would otherwise greatly threaten access to important food resources for our communities.

IX. BOEMRE MUST PROPERLY ASSESS THE POTENTIAL CUMULATIVE IMPACTS TO SUBSISTENCE HUNTING AND THE BOWHEAD WHALE.

For many years, the AEW has been emphasizing the need for BOEMRE, NMFS and other agencies of the federal government to consider fully the potential cumulative impacts of offshore oil and gas operations on the bowhead whale, other marine mammals, subsistence activities, and the health of the Inupiat people. We reiterate those concerns once again here.

It is critical for BOEMRE to conduct an appropriate cumulative impacts analysis, and in particular for bowhead whales. As an endangered migratory species with unique habitat requirements, the cumulative impacts analysis must necessarily encompass the geographic range of the bowhead and a variety of anthropogenic activities that could potentially impact the species and/or degrade its marine habitat. The cumulative effects analysis must consider impacts resulting from activities across a broad geographic range including oil and gas activities (seismic and drilling) in the American Arctic, the Russian Far East, and the Canadian Beaufort Sea; icebreaking; increased vessel traffic in the Bering Straits, Chukchi Sea, and Beaufort Sea; commercial fishing (including in the northern Bering Sea); increased military presence; and other relevant operations. Also, the analysis must consider the context in which the proposed action will occur, taking into account climate change and ocean acidification.

The analysis must include quantified or detailed information, and not just be based on broad and general statements. A proper cumulative impact analysis must include "some quantified or detailed information: . . . [general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information

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could not be provided." *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (internal citations omitted). Courts have made clear that cumulative impacts analyses based on "very broad and general statements devoid of specific, reasoned conclusions" are inadequate. *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 811 (9th Cir. 1999). The agency must consider "any and all significant cumulative impacts and assimilate within its decision making any synergistic threats to the environment." *North Slope Borough v. Andrus*, 642 F.2d 589, 600 (D.C. Cir. 1980) (emphasis added).

The existing analysis fails to comport with these requirements. The revised SEIS "conclude[s] that no significant cumulative impacts would result from routine activities associated [with] the Proposed Action or alternatives." SEIS at 286. The SEIS repeatedly discloses that potential impacts to the bowhead whale exist, but does not explain why such risks do not amount to anything significant:

The following resources could contribute to potential cumulative effects on marine mammals found in the Chukchi Sea Planning area: . . .

- activities related to offshore oil and gas exploration and development
- marine vessel traffic
- research activities
- climate change
- pollution and contaminants

SEIS at 290. With the majority of these threats resulting from the proposed action, BOEMRE has an obligation to explain how such threats do not amount to a significant impact. By failing to do so, the SEIS places an unwarranted risk upon our communities and threatens our dependence on the bowhead whale.

In sum, we strongly encourage BOEMRE to look at operations throughout the range of the bowhead whale over the duration of the proposed leases in conducting a cumulative impacts analysis. These requirements are mandated by law and are the only way to accurately identify the potential threats to the bowhead whale and its habitat.

XI. CONCLUSION

The NEPA process requires that agencies take a hard look at the available science to determine what environmental impacts will occur due to a proposed action. Such analysis is fundamental to allow the decision-maker to make a reasoned choice among the possible alternatives for the action. It is imperative that the revised SEIS sufficiently analyze the relevant short- and long-term impacts that may occur due to oil and natural gas activities in the Chukchi Sea. With significant adverse impacts to the bowhead whale and subsistence hunting clearly possible, BOEMRE has an obligation to provide an SEIS that is proper in its depth and breadth. The current SEIS fails to: address the requirements of the MMPA; provide diverse alternatives with varied impacts or detailed mitigation measures or lease sale stipulations; address the fall subsistence whale hunts along the Chukchi Sea coast and in the Bering Strait region; use appropriate legal criteria for determining significance thresholds; adequately analyze impacts to bowhead whales and subsistence communities; and sufficiently address the ramifications of a

VLOS. The risk from these environmental impacts is placed unfairly upon our communities who have depended on the bowhead whale for generations and we ask BOEMRE to address this inequity and rectify the legal deficiencies in the SEIS. Please consider these comments and understand the severe ramifications the proposed action poses to our communities and livelihood.

Sincerely,

Johnny L. Aiken
Executive Director

cc: Harry Brower, Chairman

DRAFT FOR DISCUSSION PURPOSES ONLY

OIL SPILL CONTINGENCY AGREEMENT

BY AND BETWEEN

AND

THE ALASKA ESKIMO WHALING COMMISSION, NORTH SLOPE BOROUGH, AND INUPIAT COMMUNITY OF THE ARCTIC SLOPE

DATE

_____ recognizes the critical importance of subsistence hunting to the Alaska Eskimo Whaling Commission ("AEWC"), the North Slope Borough ("NSB"), and the Inupiat Community of the Arctic Slope ("ICAS") (hereinafter collectively referred to as "the Community"). The Community's centuries-old cultural practices associated with subsistence hunting, particularly that of the bowhead whale, are essential to its members' sense of identity and vitality. Each year,¹ Community members conduct their annual bowhead whale subsistence hunt and participate in the customary practice of sharing among villages.

The International Whaling Commission ("IWC") requires the Community to demonstrate through peer-reviewed science that its allotted annual quota of whales is necessary to meet the nutritional and cultural needs of the Community. _____ understands that its activities (hereinafter, "_____s Activities") as described in (insert name of permit or plan that governs the company's activities) ("_____s Plan")² pose a risk of damage to the population of whales in the Chukchi and/or Beaufort Seas, and may result in the reduction of the

¹ Subsistence hunters from Barrow harvest bowhead whales during the both the spring and fall.

² _____s Activities include all activities described in _____s Plan as of (insert applicable date), even if _____s Activities take place after the originally contemplated timeframe. _____s Activities also include any additional activities described in any extension of _____s Plan.

Community's IWC quota. Other marine life relied upon by the Community, including beluga whales, ringed seals, bearded seals, walrus, polar bears, fish and water fowl, may also be affected. The loss of any one of these species would place an additional burden on the remaining species and on non-marine animals such as caribou.

_____ also understands the serious consequences to the Community and its culture that would result from an inability to engage in subsistence hunting and its associated activities due to _____s activities. While the effects of an oil spill might be partially mitigated through costly measures such as hunting for subsistence resources at a different location, trading quotas with other villages and transporting the catch, or hunting alternate species, centuries of traditional hunting practices would be disrupted. Villages outside the Community would also be affected by an oil spill, as customary patterns of sharing and bartering among villages would be disrupted.

Accordingly, in addition to complying with all applicable federal, state and local oil spill laws, regulations and permit conditions, _____ agrees to mitigate the subsistence resource-related impacts that may result from a triggering event (as defined in Section I.A) in accordance with this Agreement.

I. MITIGATION

A. Triggering Event

A triggering event occurs whenever _____s Activities result in any discharge (as defined in 33 U.S.C. § 2701(7)) of liquid hydrocarbons (including, but not limited to, crude oil and diesel fuel), irrespective of cause, including Acts of God, that:

1. causes liquid hydrocarbons to be present in the water of the Beaufort, Chukchi, or Bering Seas, including ice and broken ice,
2. has the potential to adversely affect³ bowhead whales and their habitat, or other species harvested for subsistence use and their habitat, and
3. is followed by a reduction in the availability of these species for subsistence use in the area(s) in which they are traditionally hunted.

³ Adverse effects may be direct or indirect and may result from any cause associated with the discharge, including but not limited to oil spills, hazing or other oil spill cleanup measures described in Appendix I.

Alaska Eskimo Whaling Commission Comment

Evidence of a "reduction in availability for subsistence use" may include (but is not limited to) any of the following: changes in migratory behavior, reduced numbers of a subsistence resource population, contamination of the subsistence resource, increased travel times/distances to find the subsistence resources, forced reliance on alternative food sources, or a reduction in the IWC harvest quota resulting from an oil spill.

B. Financial Assurance

_____ shall provide financial assurance that it shall maintain a fund to assist the Community upon the occurrence of a Triggering Event. The fund shall be controlled by a trustee ("Trustee") agreed upon by _____ and the Community.

1. Financial Assurance Instrument

_____ agrees to obtain a financial assurance instrument ("Instrument," attached as Appendix II) guaranteed by the United States Government or an FDIC-insured bank and made payable to the Trustee. The Instrument shall be held by the Trustee for the benefit of the Community and for disbursement to the Community in accordance with this Agreement. The funds represented by the Instrument shall be at least \$20,000,000 (Twenty Million U.S. Dollars) in 2001 dollars adjusted annually [based on the rate of inflation appropriate for the North Slope of Alaska], or in the amount set forth in Appendix if it is greater.

The Community and _____ shall re-estimate the costs underlying the need for financial assurance at least once every three years, and _____ shall provide for any increase in the costs by updating the Instrument to reflect increased financial insurance or providing an additional instrument.

_____ 's liability under the Agreement is not limited to amount represented by the instrument, nor is it limited by any failure to re-estimate the costs underlying the need for financial assurance.

2. Purposes for Which Trustee May Disburse Funds

Upon the occurrence of a Triggering Event and a timely (as defined in Part I.B.5) request by the Community, the Trustee shall disburse funds for any of the following purposes:

- a. Expenses related to relocating subsistence hunters and their equipment to alternate hunting sites and safely returning the hunters, their equipment, and their subsistence catch to their villages.
b. Expenses related to the pursuit and acquisition of subsistence or alternate food supplies to replace subsistence resources that are otherwise unavailable.
c. Counseling, healthcare services, and cultural assistance for affected persons of the Community to handle the disruptions to their lives and culture.
d. Assistance for AEWC to restore the IWC quota in the event it is affected by an oil spill.
e. Any other purpose mutually agreed to by the Community and _____.

3. Trustee

_____ and the Community select (insert name of Trustee) as the Trustee. At any time _____ and the Community may decide to select a different Trustee. At no time shall the Trustee be affiliated with or in any way subject to the influence of the Community or _____. The Trustee is authorized to disburse funds represented by the financial assurance instrument in accordance with the Agreement.

4. Alternate Trustee

Should the Trustee at any time be unable or unwilling to perform the duties required under the Agreement, _____ and the Community shall select an Alternate Trustee.

5. Disbursement of Funds

The Trustee shall disburse funds within forty-eight hours of a timely written request by the Trustee by the NSB Mayor, the AEWC Chairman or Executive Director, and the ICAS President.

A request is timely if it is made within three years of the time at which Community noticed or should have noticed adverse effects (as described in I.A. note 6).

Alaska Eskimo Whaling Commission Comment

The NSB Department of Administration and Finance, or its successor agency, shall be responsible for receipt of funds from the Trustee and disbursement of the funds, with the approval of the AEWC and ICAS, to the Community.

The Community shall use funds it receives from the Trustee to mitigate costs identified in Part I.B.2. of the Agreement, and shall document for the Trustee that the funds are so used. These expenditures and documentation shall be subject to audit by an independent third party auditor selected by _____ and the Trustee.

The Trustee generally shall only disburse funds for two months in advance of use. However, the Trustee shall release funds for costs that require up-front payment for a long term cost item.

A request for disbursement of funds made by the Community pursuant to the terms of this Agreement shall be granted irrespective of any dispute.

_____ retains the right to enter the appropriate dispute resolution process (as described in Part II) to determine whether the Community received an impermissible disbursement or excess of that permitted by the Agreement. Following a determination in _____ 's favor, the Community will, within one year, return to _____ the amount that was determined to not be allowed under the Agreement.

II. DISPUTE RESOLUTION PROCESSES

A. Disputes Related to a Triggering Event and Notice of Adverse Effects

In the event of a dispute between the Community and _____ related to whether a Triggering Event occurred or the time at which the Community should have noticed the adverse effects of a Triggering Event, the dispute shall be resolved by an independent panel of experts selected by _____ and the Community through the following process:

- 1. The NSB Mayor, the AEWC Chairman or Executive Director, and the ICAS President, and an authorized agent of _____ will send a

Alaska Eskimo Whaling Commission Comment

joint letter to the Chairperson⁴ requesting that s/he select and convene a panel of individuals with expertise in the areas of research and study necessary for making a determination as to whether a Triggering Event occurred or the time at which the Community should have noticed the adverse effects of a Triggering Event. The number of experts and the types of expertise required for this purpose will be at the Chairperson's discretion. The Chairperson shall inform _____ and the Community of his or her decision regarding panel selection.

- 2. Within 60 days of sending the letter to the Chairperson, the Community and _____ will provide the Chairperson with copies of all documents they have relating in any way to _____ 's Activities, the Triggering Event, and adverse effects.

- 3. The Chairperson will select the earliest possible date⁵ and arrange a meeting place or teleconference for the panel to determine what additional information is required. The Chairperson shall obtain the additional information, if required. The Chairperson shall inform _____ and the Community of his or her decisions regarding additional information.

- 4. Any testimony from interviews by panel members with any third party will be written and made available to _____ and the Community upon request.

- 5. The panel will hold a sufficient number of meetings or teleconferences lasting for an amount of time sufficient to enable the Chairperson and the panel members to confer and conduct their deliberations.

- 6. One scientist representing the NSB Department of Wildlife Management and one scientist representing _____ may attend all panel meetings and teleconferences. Such observers will not participate in the panel's deliberations and will not seek to affect panel decisions.

⁴ As of the date _____ and the Community entered this Agreement, and until _____ and the Community agree otherwise, the Chairperson is Dr. John Kelly of the University of Alaska, Fairbanks. If Dr. Kelly is unable or unwilling to serve, _____ and the Community shall agree on the selection of an alternate Chairperson.

⁵ The meeting date shall be no later than six months from the date the Chairperson receives of the above-referenced request letter.

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7. The panel will provide a written report of its conclusions. The report will be delivered to the Community and _____ no later than 45 days following the conclusion of the panel's final meeting.

8. _____ and the Community agree that the determination of the panel will be considered conclusive and binding as to whether a Triggering Event occurred and/or the time at which the Community should have noticed the adverse effects of a Triggering Event. This determination is not subject to review by the independent third party under Section II.B of this Agreement.

9. All costs and expenses associated with the dispute resolution process described in this subsection will be borne by _____, including but not limited to, the Chairperson's fees, fees charged by panel members, travel expenses for all participants, administrative costs and conference room rentals.

B. All Other Disputes Related to the Agreement

Should a dispute arise between _____ and the Community or the Trustee regarding any issue relating to the Agreement other than those issues described in II.A, the aggrieved party shall provide written notice to the other party that the former wishes to exercise its rights under this clause. Following issuance of the notice, parties shall conduct good faith negotiations. If the dispute is still unresolved after 20 days, it shall be resolved through mediation in Barrow, Alaska or Anchorage, Alaska.

This mediation will begin upon at least thirty (30), but no more than sixty (60) days prior written notice given by the party seeking dispute resolution within the time for commencing a legal action involving the controversy. Such notice shall be given six months before the statutory time limit for commencing a legal action involving the controversy. The independent third party mediator will be selected by mutual consent of _____ and the Community from a list of available members of the American Arbitration Association.

(insert name of company) Date

Mayor, North Slope Borough Date

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Chairman, Alaska Eskimo Whaling Commission Date

President, Inupiat Community of the Arctic Slope Date

Alaska Eskimo Whaling Commission Comment

Appendix I

OIL SPILL SCENARIOS AND ACTION PLANS

Alaska Eskimo Whaling Commission Comment

Appendix II

FINANCIAL ASSURANCE INSTRUMENTS

**2011 OPEN WATER SEASON
PROGRAMMATIC CONFLICT AVOIDANCE AGREEMENT**

BETWEEN

**ARCTIC CABLE COMPANY, LLC
BP EXPLORATION (ALASKA), INC.
ENI US OPERATING COMPANY, INC.
EXXON MOBIL CORPORATION
ION / GX TECHNOLOGY
PIONEER NATURAL RESOURCES ALASKA, INC.
SHELL OFFSHORE, INC
STATOIL**

AND

**THE ALASKA ESKIMO WHALING COMMISSION
THE BARROW WHALING CAPTAINS' ASSOCIATION
THE KAKTOVIK WHALING CAPTAINS' ASSOCIATION
THE NUIQSUT WHALING CAPTAINS' ASSOCIATION
THE PT. HOPE WHALING CAPTAINS' ASSOCIATION
THE PT. LAY WHALING CAPTAINS' ASSOCIATION
THE WAINWRIGHT WHALING CAPTAINS' ASSOCIATION**

**Final for Signature
March 31, 2011**

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TITLE I – GENERAL PROVISIONS

SECTION 101. APPLICATION.

Title I applies to all Participants.

Title II applies to all Participants, except as provided in Titles III or VI.

Title III applies to those Participants who operate barge or transit vessels in the Beaufort Sea or Chukchi Sea.

Titles IV and V apply only to those Participants who engage in oil and gas operations.

Title VI applies to those Participants who engage exclusively in geophysical activities that are conducted at least 40 miles or more from the Alaska coast in the Beaufort Sea or Chukchi Sea and begin on or after October 1, 2011.

Provisions that apply to a specific activity or are designated as specific to either the Beaufort Sea or Chukchi Sea apply only to Participants that engage in that activity or operate in that area, and provisions applicable to activities a Participant does not engage in or areas in which a Participant does not operate do not apply to that Participant.

SECTION 102. PURPOSE.

The purpose of this Agreement is to provide:

- (1) Equipment and procedures for communications between Subsistence Participants and Industry Participants;
- (2) Avoidance guidelines and other mitigation measures to be followed by the Industry Participants working in or transiting the vicinity of active subsistence hunters, in areas where subsistence hunters anticipate hunting, or in areas that are in sufficient proximity to areas expected to be used for subsistence hunting that the planned activities could potentially adversely affect the subsistence bowhead whale hunt through effects on bowhead whales;
- (3) Measures to be taken in the event of an emergency occurring during the term of this Agreement; and
- (4) Dispute resolution procedures.

SECTION 103. DEFINITIONS.

(a) Defined Terms.

For the purposes of this Agreement:

- (1) The term "Agreement" means this 2011 Open Water Season Programmatic Conflict Avoidance Agreement and any attachments to such agreement.
- (2) The term "at-sea oil and gas operations" does not include gravel islands or fixed platform developments located near shore (for example Northstar or Oooguruk) or Near Shore Operations Support Vessels.
- (3) The term "barge" means a non-powered vessel that is pushed or towed, and the accompanying pushing or towing vessel, which is used solely to transport materials through the Beaufort Sea or Chukchi Sea. Such term does not include any vessel used to provide supplies or support to at-sea oil and gas operations or Near Shore Operations Support Vessels.
- (4) The term "Com-Center" means a communications systems coordination center established under Section 203.
- (5) The term "geophysical activity" means any activity the purpose of which is to gather data for imaging the marine subsurface environment, including but not limited to use of air guns, sonar, and other geophysical equipment used for seismic exploration or shallow hazard identification.
- (6) The term "geophysical equipment" means equipment, such as air gun arrays over 300 cubic inches or sparker arrays over 20,000 kJ, employed on a vessel or a towed array, that generates sound waves for the purpose of imaging the subsurface marine environment for exploration and development purposes. The term does not include vessel engines, generators, or sources such as fathometers, fish finders, side-scan sonar, or other sources intended for engineering and/or transportation purposes.
- (7) The term "Industry Participants" means all parties to this Agreement who are not Subsistence Participants.
- (8) The term "Marine Mammal Observer / Inupiat Communicator" or "MMO/IC" means an observer hired by an Industry Participant for the purpose of spotting and identifying marine mammals in the area of that Industry Participant's operations during the Open Water Season. The MMO/IC also serves as the on-board Inupiat communicator who can communicate directly with whaling crews.

- (9) The term "Near Shore Operations Support Vessels" means vessels (including aircraft) used to support related activities (such as supply, re-supply, crew movement, and facility maintenance) for near shore oil and gas operations by an Industry Participant.
- (10) The terms "NSB" and "NSB DWM" mean the North Slope Borough and the North Slope Borough Department of Wildlife Management, respectively.
- (11) The term "oil and gas operations" means all oil and gas exploration, development, or production activities (including, but not limited to, geophysical activity, exploratory drilling, development activities (such as dredging or construction), production drilling, or production, and related activities (such as supply, re-supply, crew movements, and facility maintenance) by or for any Industry Participant, including aircraft and vessels of whatever kind used in support of such activities, occurring in the Beaufort Sea or Chukchi Sea, whether occurring near shore or offshore, but does not include barge traffic, transit vessel traffic, cable laying vessel traffic, or research vessel traffic (i.e. traffic by a vessel which is only conducting research and is not conducting any geophysical activities) by or for any Participant.
- (12) The term "Open Water Season" means the period of the year when ice conditions permit navigation or oil and gas operations to occur in the Beaufort Sea or Chukchi Sea, as appropriate.
- (13) The term "Participants" means all parties identified in this Agreement by name and whose representative(s) has signed the Agreement, and all contractors of such parties. When used alone the term includes both Industry Participants and Subsistence Participants.
- (14) The term "Primary Sound Source Vessel" means a vessel owned or operated by or for an Industry Participant that (A) employs air gun arrays greater than 300 cubic inches or sparkers greater than 20,000 kJ, for imaging the subsurface environment, (B) is used to monitor any safety zone around a vessel described in subsection (A), (C) is engaged in ice-breaking, or (D) is the lead vessel in a group of barge or transit vessels.
- (15) The term "sonar" means equipment, employed as hull mounted or towed array, intended for the active location of surface or underwater vessels. The term does not include vessel engines, generators, or sources such as fathometers, fish finders, side-scan sonar, or other sources intended for engineering, cable laying or routing, and/or transportation purposes.

- (16) The term "Subsistence Participants" means the Alaska Eskimo Whaling Commission (AEWC) and its members, including the whaling captains' associations identified on the cover of this Agreement, as well as any individual members of those associations.
- (17) The term "transit vessel" means a powered vessel that is used solely to transport materials through the Beaufort Sea or Chukchi Sea. Such term does not include a vessel used to provide supplies or other support to at-sea oil and gas operations or Near Shore Operations Support Vessels.
- (b) **Geographically Limited Terms.**
- For the purposes of this Agreement:
- (1) The term "Beaufort Sea" means all waters off the northern coast of Alaska from Point Barrow to the Canadian border.
- (2) The term "Chukchi Sea" means all waters off the western and northern coasts of Alaska from Cape Prince of Wales to Point Barrow.

SECTION 104. TERM, SCOPE, AND LIMITATIONS.**(a) Term.**

The term of this Agreement shall commence with the signing of this document by the Participants and shall terminate upon completion of the Nuiqsut, Kaktovik, Barrow, Wainwright, Pt. Lay, and Pt. Hope Fall Bowhead Hunts or the Beaufort Sea Post Season Meeting required under Section 108(a) and Chukchi Sea Post-Season Meetings in Barrow, Wainwright, Pt. Lay, and Pt. Hope required under Section 108(b), whichever is later.

(b) Scope.

The Participants agree that, unless otherwise specified:

- (1) The mitigation measures identified in this Agreement, which are intended to mitigate interference by oil and gas operations and barge and transit vessel traffic with the Alaskan Eskimo subsistence bowhead whale hunt, are designed to apply to all activities of each Participant during the 2011 Open Water Season, whether referenced specifically or by category, and to all vessels and locations covered by this Agreement, whether referenced specifically or by category.

- (2) This Agreement is intended to apply to all oil and gas operations and barge and transit vessel traffic during the 2011 Open Water Season in the Beaufort Sea or Chukchi Sea.
- (3) Vessels and locations covered by this Agreement include those identified in the Agreement, as well as any other vessels or locations that are employed by or for the Industry Participants in the Beaufort Sea or Chukchi Sea during the 2011 Open Water Season.

(c) Limitations of Obligations.

The following limitations apply to this Agreement.

- (1) No cooperation among the Participants, other than that required by this Agreement, is intended or otherwise implied by their adherence to this Agreement. In no event shall the signatures of any representative of the Alaska Eskimo Whaling Commission (AEWC), or of the Barrow, Nuiqsut, Kaktovik, Wainwright, Pt. Hope, or Pt. Lay Whaling Captains' Associations, or of any other Whaling Captains' Association be taken as an endorsement of any Arctic operations or Beaufort Sea or Chukchi Sea OCS operations by any oil and/or gas operator or contractor.
- (2) Adherence to the procedures and guidelines set forth in this Agreement does not in any way indicate that any Inupiat or Siberian Yupik whalers or the AEWC agree that industrial activities are not interfering with the bowhead whale migration or the bowhead whale subsistence hunt. Such adherence does not represent an admission on the part of the Industry Participants or their contractors that the activities covered by this Agreement will interfere with the bowhead whale migration or the bowhead whale subsistence hunt.
- (3) No member of the oil and gas industry or any contractor has the authority to impose restrictions on the subsistence hunting of bowhead whales or associated activities of the AEWC, residents of the Villages of Nuiqsut, Kaktovik, Barrow, Wainwright, Pt. Lay, or Pt. Hope, or residents of any other village represented by the AEWC.
- (4) In the event additional parties engage in oil and gas operations in the Beaufort Sea or Chukchi Sea during the summer or fall of 2011 the Participants shall exercise their good-faith efforts to encourage those parties to enter into this Agreement. Should additional parties enter into this Agreement at a date subsequent to the date of the signing of this document and before the termination of the 2011 bowhead whale subsistence hunting season, the AEWC will provide to all Participants a supplement to this document with the added signatures.

- (5) No Participant is responsible for enlisting additional parties to adhere to the terms and conditions of the Agreement. Similarly, **THE AEWC IS NOT RESPONSIBLE FOR, OR A PARTY TO, ANY AGREEMENT AMONG THE INDUSTRY PARTICIPANTS** concerning the apportionment of expenses necessary for the implementation of this Agreement.

- (6) In adhering to this Agreement, none of the Participants waives any rights existing at law. All Participants agree that the provisions of this document do not establish any precedent as between them or with any regulatory or permitting authority.

- (7) **PARTICIPANTS' OBLIGATIONS SHALL BE SEPARABLE:** All Participants to this Agreement understand that each Participant represents a separate entity. The failure of any Participant to adhere to this Agreement or to abide by the terms and conditions of this Agreement shall not affect the obligation of other Participants to adhere to this Agreement and to proceed accordingly with all activities covered by this Agreement. Nor shall any Participant's adherence to this Agreement affect that Participant's duties, liabilities, or other obligations with respect to any other Participant beyond those stated in this Agreement. If an Industry Participant does not receive permit approvals from regulatory agencies to conduct its proposed activities, then that company may withdraw from this Agreement.

SECTION 105. REGULATORY COMPLIANCE.**(a) United States Coast Guard Requirements.**

The Participants shall comply with all applicable United States Coast Guard requirements for safety, navigation, and notice.

(b) Environmental Regulations and Statutes.

The Participants shall comply with all applicable environmental regulations and statutes.

(c) Other Regulatory Requirements.

The Participants shall comply with all applicable federal, state, and local government requirements.

SECTION 106. DISPUTE RESOLUTION.

Subject to the terms of Section 104(c)(7) of this Agreement, all disputes arising between any Industry Participants and any Subsistence Participants shall be addressed as follows:

- (1) The dispute shall first be addressed between the affected Participant(s) in consultation with the affected village Whaling Captains' Association and the Industry Participant(s)' Local Representative.
- (2) If the dispute cannot be resolved to the satisfaction of all affected Participants, then the dispute shall be addressed with the affected Participants in consultation with the AEWC.
- (3) If the dispute cannot be satisfactorily resolved in accordance with paragraphs (1) and (2) above, then the dispute shall be addressed with the AEWC and the affected Participants in consultation with representatives of NOAA Fisheries.
- (4) All Participants shall seek to resolve any disputes in a timely manner, and shall work to ensure that requests for information or decisions are responded to promptly.

SECTION 107. EMERGENCY AND OTHER NECESSARY ASSISTANCE.**(a) Emergency Communications.**

ALL VESSELS SHOULD NOTIFY THE APPROPRIATE COM-CENTER IMMEDIATELY IN THE EVENT OF AN EMERGENCY. The appropriate Com-Center operator will notify the nearest vessels and appropriate search and rescue authorities of the problem and advise them regarding necessary assistance. (See attached listing of local search and rescue organizations in Attachment I.)

(b) Emergency Assistance for Subsistence Whale Hunters.

Section 403 of Public Law 107-372 (16 U.S.C. 916c note) provides that "Notwithstanding any provision of law, the use of a vessel to tow a whale, taken in a traditional subsistence whale hunt permitted by Federal law and conducted in waters off the coast of Alaska is authorized, if such towing is performed upon a request for emergency assistance made by a subsistence whale hunting organization formally recognized by an agency of the United States government, or made by a member of such an organization, to prevent the loss of a whale." Industry Participants will advise their vessel captains that, under the circumstances described above, assistance to tow a whale is permitted under law when requested by a Subsistence Participant. Under the circumstances described above, Industry Participants will provide such assistance upon a request for emergency assistance from a Subsistence Participant, if conditions permit the Industry Participant's vessel to safely do so.

SECTION 108. POST-SEASON REVIEW / PRESEASON INTRODUCTION.**(a) Beaufort Sea Post-Season Joint Meeting.**

Following the end of the fall 2011 bowhead whale subsistence hunt and prior to the 2012 Pre-Season Introduction Meetings, the Industry Participant that establishes the Deadhorse and Kaktovik Com Centers will offer to the AEWC Chairman to host a joint meeting with all whaling captains of the Villages of Nulikut, Kaktovik and Barrow, the Marine Mammal Observer / Inupiat Communicators stationed on the Industry Participants' vessels in the Beaufort Sea, and with the Chairman and Executive Director of the AEWC, at a mutually agreed upon time and place on the North Slope of Alaska, to review the results of the 2011 Beaufort Sea Open Water Season, unless it is agreed by all designated individuals or their representatives that such a meeting is not necessary.

(b) Chukchi Sea Post-Season Village Meetings.

Following the completion of the 2011 Chukchi Sea Open Water Season and prior to the 2012 Pre-Season Introduction Meetings, the Industry Participants involved, if requested by the AEWC or the Whaling Captain's Association of each village, will host a meeting in each of the following villages: Wainwright, Pt. Lay, Pt. Hope, and Barrow (or a joint meeting of the whaling captains from all of these villages if the whaling captains agree to a joint meeting) to review the results of the 2011 operations and to discuss any concerns residents of those villages might have regarding the operations. The meetings will include the Marine Mammal Observer / Inupiat Communicators stationed on the Industry Participants' vessels in the Chukchi Sea. The Chairman and Executive Director of the AEWC will be invited to attend the meeting(s).

(c) Pre-season Introduction Meetings.

- (1) Immediately following each of the above meetings, and at the same location, the Industry Participants will provide a brief introduction to their planned operations for the 2012 Open Water Season. Each Industry Participant should provide hand-outs explaining their planned activities that the whaling captains can review.
- (2) Subsistence Participants understand that any planned operations discussed at these Pre-Season Introduction Meetings, and the corresponding maps, will represent the Industry Participant's best estimate at that time of its planned operations for the coming year, but that these planned operations are preliminary, and are subject to change prior to the 2012 Open Water Season Meeting.

(d) Map of Planned Industry Participant Activities.

As practicable, Industry Participants shall jointly prepare and provide the AEWC with a large-scale map of the Beaufort and Chukchi Seas showing the locations and types of oil and gas and barge and transit activities planned by each Industry Participant. This map will be for use by the AEWC and Industry Participants during the 2012 CAA Meeting.

SECTION 109. INDIVIDUAL NOTIFICATION.

In the event that any Industry Participant does not become a signatory to this Agreement, the local Whaling Captains' Associations shall be notified by the AEWC, no later than June 30, 2011, so that the local Whaling Captains' Associations can prepare to talk with the non-signatories to avoid conflict during that association's fall subsistence bowhead whaling season.

TITLE II -- OPEN WATER SEASON COMMUNICATIONS**SECTION 201. MARINE MAMMAL OBSERVERS / INUPIAT COMMUNICATORS.****(a) Marine Mammal Observer / Inupiat Communicator Required.**

- (1) In General. Each Industry Participant agrees to employ a Marine Mammal Observer / Inupiat Communicator (MMO/IC) on board each Primary Sound Source Vessel owned or operated by such Industry Participant in the Beaufort Sea or Chukchi Sea.
- (2) Special Rule for Inside Beaufort Sea Barrier Islands. Industry Participants whose seismic acquisition operations are limited to an area exclusively within the barrier islands need employ an MMO/IC on one Primary Sound Source Vessel only.
- (3) Near Shore Operations Support Vessels. Industry Participants are not required to employ an MMO/IC on Near Shore Operations Support Vessels.
- (4) Sealift Operations. For Industry Participants conducting sealift operations in which two tugs towing barges are accompanied within ½ mile by a third light tug at all times, a MMO/IC is required to be employed on the light tug only.

(b) Duties of Marine Mammal Observer / Inupiat Communicator.

- (1) Each MMO/IC is to be employed as an observer and Inupiat communicator for the duration of the 2011 Open Water Season on the vessel on which he or she is stationed.
- (2) As a member of the crew, the MMO/IC will be subject to the regular code of employee conduct on board the vessel and will be subject to discipline, termination, suspension, layoff, or firing under the same conditions as other employees of the vessel operator or appropriate contractor.
- (3) Once the source vessel on which the MMO/IC is employed is in the vicinity of a whaling area and the whalers have launched their boats, the MMO/IC's primary duty will be to carry out the communications responsibilities set out in this Title.
- (4) At all other times, the MMO/IC will be responsible for keeping a lookout for bowhead whales and/or other marine mammals in the vicinity of the vessel to assist the vessel captain in avoiding harm to the whales and other marine mammals.

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- (5) It is the MMO/IC's responsibility to call the appropriate Com-Center as set out in Sections 202 and 203.
- (6) The MMO/IC will be responsible for all radio contacts between vessels owned or operated by each of the Industry Participants and whaling boats covered under Section 207 of this Agreement and shall interpret communications as needed to allow the vessel operator to take such action as may be necessary pursuant to this Agreement.
- (7) The MMO/IC shall contact directly subsistence whaling boats that may be in the vicinity to ensure that conflicts are avoided to the greatest possible extent.
- (8) The MMO/IC will maintain a record of his or her communications with each Com-Center and the subsistence whaling boats, as well as any marine mammal sightings by the MMO/IC.

SECTION 202. COM-CENTER GENERAL COMMUNICATIONS SCHEME.**(a) Reporting Positions for Vessels Owned or Operated by the Industry Participants.**

(1) All vessels (other than vessels covered under sections 302 and 602) shall report to the appropriate Com-Center at least once every six hours commencing with a call at approximately 06:00 hours. Each call shall report the following information:

- (A) Vessel name, operator of vessel, charter or owner of vessel, and the project the vessel is working on.
- (B) Vessel location, speed, and direction.
- (C) Plans for vessel movement between the time of the call and the time of the next call. The final call of the day shall include a statement of the vessel's general area of expected operations for the following day, if known at that time.

EXAMPLE: This is the Arctic Endeavor, operated by _____ for _____ at Chukchi Sea prospect. We are currently at _____ north _____ west, proceeding SE at _____ knots. We will proceed on this course for _____ hours and will report location and direction at that time.

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- (2) The appropriate Com-Center shall be notified if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from announced course, and such Com-Center shall notify all whalers of such changes. A call to the appropriate Com-Center shall be made regarding any unsafe or unanticipated ice conditions.
- (3) In the event that the Industry Participant's operation includes seismic data acquisition, the operator reserves the right to restrict exact vessel location information and provide more general location information.

(b) Reporting Positions for Subsistence Whale Hunting Crews.

- (1) All subsistence whaling captains shall report to the appropriate Com-Center at the time they launch their boats from shore and again when they return to shore.
- (2) All subsistence whaling captains shall report to such Com-Center the initial GPS coordinates of their whaling camps.
- (3) Additional communications shall be made on an as needed basis.
- (4) Each call shall report the following information:

(A) The crew's location and general direction of travel.

EXAMPLE: This is _____. We are just starting out. We will be traveling north-east from _____ to scout for whales. I will call if our plans change.

(B) The presence of any vessels or aircraft owned or operated by any of the Industry Participants, or their contractors, that are not observing the specified guidelines set forth in Title V on Avoiding Conflicts.

(C) The final call of the day shall include a statement of the whaling captain's general area of expected operations for the following day, if known at the time.

- (5) Any subsistence whale hunter preparing to tow a caught whale shall report to the appropriate Com-Center before starting to tow.

EXAMPLE: This is Archie Ahkiviana. I am _____ north, _____ west. I have a whale and am towing it into _____.

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- (6) Each time a subsistence whaling camp is moved, it shall be reported promptly to the appropriate Com-Center, including the new GPS coordinates.
- (7) Subsistence whale hunters shall notify the appropriate Com-Center promptly if, due to weather or any other unforeseen event, whaling is not going to take place that day.
- (8) Subsistence whaling captains shall contact the appropriate Com-Center promptly and report any unexpected movements of their vessel.

(c) Responsibilities of Participants.**(1) Monitoring VHF Channel 16.**

All vessels covered by Sections 207, 301, and 401 of this Agreement shall monitor marine VHF Channel 16 at all times.

(2) Avoidance of Whale Hunting Crews and Areas

It is the responsibility of each vessel owned or operated by any of the Industry Participants and covered by Sections 301 or 401 of this Agreement to determine the positions of all of their vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.

(3) Vessel-to-Vessel Communication

After any vessel owned or operated by any of the Industry Participants and covered by Sections 301 or 401 of this Agreement has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Inupiat Communicator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

SECTION 203. THE COMMUNICATIONS SYSTEM COORDINATION CENTERS (COM-CENTERS).**(a) Chukchi Lead System Included in Com-Center Coverage.**

In addition to the Beaufort Sea and Chukchi Sea, the communications scheme shall apply in the Chukchi Sea lead system, as identified and excluded from leasing in the current MMS Five-Year Leasing Program, 2007-2012.

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(b) Set Up and Operation.

(1) Subject to the terms of Section 104(c) of this Agreement, the Industry Participants conducting operations in:

(A) the Beaufort Sea jointly will arrange for the funding of Com-Centers in Deadhorse and Kaktovik; and

(B) the Chukchi Sea jointly will arrange for the funding of Com-Centers in Barrow, Wainwright, Pt. Lay, and Pt. Hope.

(2) All six Com-Centers will be staffed by Inupiat operators. **GROUND TRANSPORTATION MUST BE PROVIDED FOR COM-CENTER OPERATIONS IN KAKTOVIK FOR POLAR BEAR AND BROWN BEAR SAFETY.** The Com-Centers will be operated 24 hours per day during the 2011 subsistence bowhead whale hunt. One Industry Participant in the Beaufort Sea and one Industry Participant in the Chukchi Sea, or their respective contractor, will be designated as the operator of the Com-Centers for that Sea, in consultation with the AEWC.

(3) Each Industry Participant shall contribute to the funding of the Com-Centers covering the areas in which it conducts oil and gas operations. The level of funding for the Com-Centers provided by each of the Industry Participants is intended to be in proportion to the scale of their respective activities, and shall be mutually agreed by the Industry Participants.

(4) The procedures to be followed by the Com-Center operators are set forth in subsection (d) below.

(c) Staffing.

(1) Each Com-Center shall have an Inupiat operator ("Com-Center operator") on duty 24 hours per day from August 15, or one week before the start of the fall bowhead whale hunt in each respective village, until the end of the bowhead whale subsistence hunt in:

(A) Kaktovik for the Kaktovik Com-Center;

(B) Nuiqsut for the Deadhorse Com-Center;

(C) Barrow for the Barrow Com-Center;

(D) Wainwright for the Wainwright Com-Center.

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- (E) Pt. Lay for the Pt. Lay Com-Center, which will be located in the Pt. Lay Whaling Captains' Association building; and
- (F) Pt. Hope for the Pt. Hope Com-Center, which will be located in the Pt. Hope Whaling Captains' Association building.

(2) All Com-Center staff shall be local hire.

(d) Duties of the Com-Center Operators.

(1) The Com-Center operators shall be available to receive radio and telephone calls and to call vessels as described below. A record shall be made of all calls from every vessel covered by Sections 207, 301, and 401 of this Agreement. Information reported regarding whales struck, lost, landed, or the location of whales struck, lost, or landed, or the number of strikes remaining, shall be confidential and shall not be disclosed to anyone other than the AEWC or the local Whaling Captains' Association. The record of all reporting calls should contain the following information:

- (A) Industry Participant Vessel:
 - (i) Name of caller and vessel.
 - (ii) Vessel location, speed, and direction.
 - (iii) Time of call.
 - (iv) Anticipated movements between this call and the next report.
 - (v) Reports of any industry or subsistence activities.
- (B) Subsistence Whale Hunting Boat:
 - (i) Name of caller.
 - (ii) Location of boat or camp.
 - (iii) Time of call.
 - (iv) Plans for travel.

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(v) Any special information such as caught whale, whale to be towed, or industry vessel conflicts with whale or whaler. Any report of the number of whales struck, lost, or landed, or of the number of strikes remaining, shall be kept confidential and shall not be disclosed by the Com-Center or any Com-Center operator to anyone other than the AEWC or the local Whaling Captains' Association. The location of whales struck, lost, or landed shall be kept confidential and shall not be disclosed except to the extent needed to avoid an Industry/Subsistence Whale Hunter conflict.

(2) Report of Industry/Subsistence Whale Hunter Conflict. In the event an industry/subsistence whale hunter conflict is reported, the appropriate Com-Center operator shall record:

- (A) Name of industry vessel.
- (B) Name of subsistence whaling captain.
- (C) Location of vessels.
- (D) Nature of conflict, data, and time.

(3) If all vessels and boats covered by Sections 207, 301, and 401 of this Agreement have not reported to the appropriate Com-Center within one hour of the recommended time, that Com-Center operator shall attempt to call all non-reporting vessels to determine the information set out above under the Duties of the Com-Center operator.

(4) As soon as location information is provided by a vessel covered by Sections 207, 301, or 401 of this Agreement, the appropriate Com-Center operator shall plot the location and area of probable operations on the large map provided at the Com-Center.

(5) If, in receiving information or plotting it, a Com-Center operator observes that operations by Industry Participants might conflict with subsistence whaling activities, such Com-Center operator shall contact the industry vessel involved and advise the Industry Participant's Local Representative(s) and the vessel operators of the potential conflict.

SECTION 204. STANDARDIZED LOG BOOKS.

The Industry Participants will provide the Com-Centers and Marine Mammal Observer / Inupiat Communicators with identical log books to assist in the standardization of record keeping associated with communications procedures required pursuant to this Agreement.

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SECTION 205. COMMUNICATIONS EQUIPMENT.

(a) Communications Equipment to be Provided to Subsistence Whale Hunting Crews.

(1) In General. The Industry Participants will provide (or participate in the provision of) the communications equipment described in paragraphs (4) and (6) of this subsection and subsection (b) of this section.

(2) Beaufort Sea. The Industry Participants funding Com-Centers in Deadhorse and Kaktovik will fund the provision of communications equipment for the whaling captains of Kaktovik and Nuiqsut in the same proportion as they fund those Com-Centers.

(3) Chukchi Sea. The Industry participants conducting operations in the Chukchi Sea will coordinate with each other to participate in funding the provision of communications equipment for the whaling captains of Barrow, Wainwright, Pt. Hope, and Pt. Lay.

(4) All-Channel, Water-Resistant VHF Radios.

These VHF radios are specifically designed for marine use and allow monitoring of Channel 16 while using or listening to another channel.

- (A) Kaktovik Subsistence Whaling Boats: 8
- (B) Kaktovik Base and Search and Rescue: 2
- (C) Nuiqsut Subsistence Whaling Boats: 12
- (D) Nuiqsut Base and Search and Rescue: 3
- (E) Barrow Base and Search and Rescue: 2
- (F) Wainwright Base and Search and Rescue: 2
- (G) Wainwright Subsistence Whaling Boats: 4
- (H) Pt. Hope Base and Search and Rescue: 2
- (I) Pt. Hope Subsistence Whaling Boats: 10

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- (J) Pt. Lay Base and Search and Rescue: 2
- (K) Pt. Lay Subsistence Whaling Boats: 4

(5) Specific VHF Channels For Each Village.

The whaling boats from each of the villages have been assigned individual VHF channels for vessel-to-vessel and vessel-to-Com-Center communications as follows:

- (A) Nuiqsut whaling crews will use Channel 68.
- (B) Kaktovik whaling crews will use Channel 69.
- (C) Barrow whaling crews will use Channel 72.
- (D) Wainwright Whaling Crews will use Channel 12.
- (E) Pt. Lay Whaling Crews will use Channel 72.
- (F) Pt. Hope Whaling Crews will use Channel 68.

(6) Satellite Telephones.

The satellite telephones are to be used as backup for the VHF radios. The satellite telephones for use on subsistence whaling boats are for emergency use only and should be programmed for direct dial to the nearest Com-Center.

- A. Kaktovik Base Phones: 2
- B. Kaktovik Subsistence Whaling Boats: 8
- C. Nuiqsut Base Phones: 2
- D. Nuiqsut Subsistence Whaling Boats: 12
- E. Barrow Subsistence Whaling Boats: 2
- F. Wainwright Subsistence Whaling Boats: 4
- G. Pt. Lay Subsistence Whaling Boats: 2

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(7) Distribution and Return of Equipment.

The distribution of the VHF radios and satellite telephone equipment to whaling captains for use during the 2011 fall bowhead subsistence whale hunting season shall be completed no later than August 15, 2011. All such units and telephone equipment provided under this Agreement, whether in this section or otherwise, will be returned promptly by the Subsistence Participants to the Industry Participant or the person providing such units and equipment at the end of each Village's 2011 fall bowhead whale subsistence hunt.

(b) Communications Equipment on Vessels Owned or Operated by the Industry Participants and/or their Contractors.

The Marine Mammal Observer / Inupiat Communicators onboard source vessels owned or operated by the Industry Participants and/or their contractors will also be supplied with all-channel VHF radios. The MMO/ICs have been assigned Channel 7 for their exclusive use in communicating with the Com-Center. Such radios shall be returned upon the completion or termination of the MMO/IC's assignment.

(c) Radio Installation and User Training.

The Whaling Captains of Nuiqsut, Kaktovik, Wainwright, Pt. Lay, and Pt. Hope, with assistance from the Industry Participants, will be responsible for the installation of the VHF radio equipment. The Industry participants will provide (or participate in the provision of) on-site user training for the VHF and satellite telephone equipment on or before August 15, 2011, if requested and as scheduled by the Whaling Captains' Associations of Nuiqsut, Kaktovik, Barrow, Wainwright, Pt. Lay, and Pt. Hope, and the Industry Participant operating the Beaufort Sea Com-Centers or Chukchi Sea Com-Centers, as appropriate.

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SECTION 206. INDIVIDUALS TO CONTACT.

Listed below are the primary contact names and phone numbers for each of the Participants.

(1) Arctic Cable Company, LLC's Local Representative

TBD

(2) BP Exploration (Alaska), Inc.'s (BP) Local Representative

LOWRY BROTT will be BP's local representative on the North Slope during the Term of this Agreement and will be stationed at Northstar Island and will be available by telephone at (907) 670-3520 and when Mr. Brott is not available, his alternate, Jim Croak, will be stationed at Northstar Island and will be available by telephone at the above number.

(3) ENI's Local Representative

Hans Neidig (907) 865-3314

(4) Exxon Mobil's Local Representative

TBD

(5) ION / GX Technology's Local Representative

TBD

(6) Pioneer Natural Resources' (Pioneer) Local Representative

PAT FOLEY will be Pioneer's local representative during the Term of this Agreement and will be stationed in Anchorage and will be available by telephone at (907) 343-2110.

(7) Shell Offshore Inc.'s (Shell) Local Representatives

JOHN MAKETA and HOWARD HILL will be Shell's local representatives on the North Slope during the Term of this Agreement and will be stationed at Barrow during Chukchi Sea operations and at Deadhorse during Beaufort Sea operations and will be available by telephone at (907) 770-3700.

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(8) STATOIL's Local Representative

TBD

(9) The Village of Kaktovik

For purposes of this Agreement, the individuals to contact for the Village of Kaktovik will be: JOSEPH KALEAK at (907) 640-6213 or 640-6515, and CHARLIE M. BROWER at (907) 640-4163 (home), (907) 640-2092 (work), or (907) 640-0052 (cell).

(10) The Village of Nuiqsut

For purposes of this Agreement, the individuals to contact for the Village of Nuiqsut will be: ISAAC NUKAPIGAK at (907) 480-6220 (Work), (907) 480-2400 (Home).

(11) The Village of Barrow

For purposes of this Agreement, the individuals to contact for the Village of Barrow will be: HARRY BROWER, JR. at (907) 852-0350 (Work), and EUGENE BROWER at (907) 852-3601.

(12) The Village of Wainwright

For purposes of this Agreement, the individuals to contact for the Village of Wainwright will be: ROSSMAN PEETOOK at (907) 763-4774, and WALTER NAYAKIK at (907) 763-2915 (Work).

(13) The Village of Pt. Hope

For purposes of this Agreement, the individuals to contact for the Village of Pt. Hope will be: CHESTER FRANKSON, SR. at (907) 368-2054 (Home).

(14) The Village of Pt. Lay

For purposes of this Agreement, the individuals to contact for the Village of Pt. Lay will be: JULIUS REXFORD (907) 833-4592 (Home), (907) 833-2214 (Work), (907) 833-2320 (Fax), THOMAS NUKAPIAK (907) 833-6467 (Home), (907) 833-3838

(15) The AEWC

For purposes of this Agreement, the individuals to contact for the AEWC shall be: HARRY BROWER, JR. at (907) 852-0350 (Work) and JOHNNY AIKEN at (907) 852-2392.

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SECTION 207. SUBSISTENCE WHALE HUNTING BOATS.

The following is a list of the number of boats each of the Subsistence Participants plan to use:

(1) Boats Owned/Used by Whaling Captains of Nuiqsut (NWCA)

The subsistence whaling crews of the Village of Nuiqsut plan to use (12) twelve boats for subsistence whale hunting during the late summer and fall of 2011.

(2) Boats Owned/Used by Whaling Captains of Kaktovik (KWCA)

The subsistence whaling crews of the Village of Kaktovik plan to use (8) eight boats for subsistence whale hunting during the late summer and fall of 2011.

(3) Boats Owned/Used by Whaling Captains of Barrow (BWCA)

The subsistence whaling crews of the Village of Barrow plan to use (40) forty boats for subsistence whale hunting during the late summer and fall of 2011.

(4) Boats Owned/Used by Whaling Captains of Wainwright (WWCA)

The subsistence whaling crews of the Village of Wainwright plan to use (4) four boats for subsistence whale hunting during the fall of 2011.

(5) Boats Owned/Used by Whaling Captains of Pt. Hope (Pt. HWCA)

The subsistence whaling crews of the Village of Pt. Hope plan to use (10) ten boats for subsistence whale hunting during the late fall of 2011.

(6) Boats Owned/Used by Whaling Captains of Pt. Lay (Pt. LWCA)

The subsistence whaling crews of the Village of Pt. Lay plan to use (4) four boats for subsistence whale hunting during the fall of 2011.

If any additional boats are put in use by subsistence whaling crews, the Industry Participants will be notified promptly through the Com-Center.

TITLE III – BARGE, TRANSIT, AND CABLE LAYING VESSEL OPERATIONS

SECTION 301. IN GENERAL.

A Participant may employ barges, transit, or cable laying vessels to transport materials or lay cable through the Beaufort Sea or Chukchi Sea during the term of this Agreement. Any Industry Participant who employs a barge or transit vessel to transport materials through the Beaufort Sea or Chukchi Sea during the term of this Agreement shall require the barge or transit vessel operator to comply with Sections 201, 205(b) and 302 of this Agreement while providing services to that Industry Participant.

SECTION 302. BARGE AND TRANSIT VESSEL OPERATIONS.

(a) Reporting Positions for Barge, Transit or Cable Laying Vessels Owned or Operated by Industry Participants.

(1) All barge, transit, or cable laying vessels shall report to the appropriate Com-Center at least once every six hours commencing with a call at approximately 06:00 hours. Each call shall report the following information:

(A) Barge, transit, or cable laying vessel name, operator of vessel, charterer or owner of vessel, and the project or entity the vessel is transporting materials for.

(B) Barge, transit, or cable laying vessel location, speed, and direction.

(C) Plans for barge, transit, or cable laying vessel movement between the time of the call and the time of the next call. The final call of the day shall include a statement of the barge or transit vessel's general area of expected operations for the following day, if known at that time.

EXAMPLE: This is the Arctic Endeavor, operated by _____ for _____ in the Chukchi Sea. We are currently at _____ north _____ west, proceeding SE at _____ knots. We will proceed on this course for _____ hours and will report location and direction at that time.

(2) The appropriate Com-Center also shall be notified if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from announced course, and such Com-Center shall notify all whalers of such changes. A call to the appropriate Com-Center shall be made regarding any unsafe or unanticipated ice conditions.

(b) Operator Duties.

All barge, transit, or cable laying vessel operators are responsible for the following requirements.

(1) Monitoring VHF Channel 16. All barge and transit vessel operators shall monitor marine VHF Channel 16 at all times.

(2) Avoidance of Whale Hunting Crews and Areas. It is the responsibility of each Industry Participant and barge or transit vessel operator to determine the positions of their barge or transit vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.

(3) Vessel-to-Vessel Communication. After any barge or transit vessel owned or operated by any Industry Participant has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Inupiat Communicator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

(c) Routing Barge, Transit, and Cable Laying Vessels.

(1) All barge, transit, and cable laying vessel routes shall be planned so as to minimize any potential conflict with bowhead whales or subsistence whaling activities. All barges and transit vessels shall avoid areas of active or anticipated whaling activity, as reported pursuant to Section 202.

(2) Beaufort Sea. Vessels transiting east of Bullen Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.

(3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at all times at least five (5) miles offshore during transit.

(d) Vessel Speeds.

Barge, transit, and cable laying vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whalers unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(e) Vessels Operating in Proximity of Bowhead Whales.

If any barge or transit vessel inadvertently approaches within 1.6 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whalers or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:

(1) reducing vessel speed to less than 5 knots within 900 feet of the whale(s);

(2) steering around the whale(s) if possible;

(3) operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;

(4) operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and

(5) checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.

(f) Marine Mammal Sighting Data.

Industry Participants whose operations are limited exclusively to barge or vessel traffic will submit to the AEWC and NSB DWM all marine mammal sighting data.

TITLE IV – VESSELS, TESTING, AND MONITORING

SECTION 401. INDUSTRY PARTICIPANT VESSELS AND EQUIPMENT.

(a) List of Vessels and Equipment Required.

Each Industry Participant engaged in oil and gas operations shall provide a list identifying all vessels or other equipment (including but not limited to boats, barges, aircraft, or similar craft) that are owned and/or operated by, or that are under contract to the Industry Participants, for use in the Beaufort Sea or Chukchi Sea for oil and gas operations or for implementation of such Industry Participant's monitoring plan. Vessels and equipment used for oil and gas operations shall be listed in Attachment II, and vessels and equipment used for monitoring plans shall be listed in Attachment III.

(b) Only Listed Vessels and Equipment (or Like Vessels and Like Equipment) May Be Used.

(1) **NONE OF THE INDUSTRY PARTICIPANTS INTENDS TO OPERATE ANY VESSEL OR EQUIPMENT (EXCEPT FOR LIKE VESSELS OR LIKE EQUIPMENT) NOT IDENTIFIED IN THE LISTS REQUIRED UNDER SUBSECTION (a) DURING THE TERM OF THIS AGREEMENT.**

(2) Notwithstanding paragraph 1, if any Industry Participant decides to use different vessels or equipment or additional vessels or equipment, such vessels and equipment shall be used only for purposes identified in Attachments II or III; and the AEWC and the whaling captains of Nuiqsut, Kaktovik, Barrow, Wainwright, Pt. Hope, and Pt. Lay shall be notified promptly through the appropriate Com-Center, as identified in Section 203 of this Agreement, and in writing, of their identity and their intended use, including location of use.

SECTION 402. SOUND SIGNATURE TESTS.**(a) Sound Source Verification Testing.**

(1) **Geophysical Equipment.** For purposes of obtaining a sound signature for Industry Participants' geophysical equipment, the Industry Participants shall have initiated a test of all geophysical equipment within 72 hours of initiating or having initiated operations in the Beaufort Sea or Chukchi Sea. Such tests shall be conducted as set forth in section 402(b).

(2) **Vessels.** For vessels engaged in geophysical activity, Industry Participants will conduct a sound source verification test for all geophysical equipment used for geophysical activity. Each Industry Participant shall establish a sound source verification range or Industry Participants may participate jointly in establishing a range for the Chukchi Sea and Beaufort Sea, or both. A separate range shall be used for the Chukchi Sea and Beaufort Sea, and vessels shall use the appropriate range for each sea in which they operate. For testing each vessel shall proceed through the range and record information on the date, time, vessel speed, vessel route, vessel load, weather conditions, and equipment operating on the vessel (all noise generating equipment on the vessel, other than geophysical equipment subject to separate testing under paragraph (1), shall be in operation while the vessel is proceeding through the range). The range should be established near a location where details on wind speed and direction are regularly monitored and archived.

(b) Mutual Agreement on Site for Testing; Advance Notice Required.

(1) **In General.** Each geophysical equipment sound signature test shall be conducted at a site mutually agreed upon by the Industry Participant conducting such test and the AEWC. Each Industry Participant conducting such sound signature test(s) will make a good faith effort to provide three (3) weeks advance notice to the AEWC and the NSB DWM of its intent to perform each test.

(2) **Beaufort Sea Testing.** For geophysical equipment sound signature tests conducted in the Beaufort Sea, the Industry Participant conducting such tests shall provide transportation for an appropriate number of representatives from: the AEWC, the whaling captains of the Villages of Barrow, Nuiqsut, and Kaktovik, and the NSB DWM to observe the sound signature tests.

(3) **Chukchi Sea Testing.** For geophysical equipment sound signature tests conducted on vessels to be used in the Chukchi Sea, the Industry Participant(s) conducting such tests shall provide transportation for an appropriate number of representatives from: the AEWC, the whaling captains of the Villages of Barrow, Wainwright, Pt. Lay, and Pt. Hope, and the NSB DWM to observe the sound signature tests.

(c) Sound Signature Data to be Made Available.

(1) Within fourteen (14) days of completing the sound signature field tests for geophysical equipment and within 30 days of the end of the operating season for sound source verification ranges, each Industry Participant and/or its contractor conducting such test(s) will make preliminary and final quality controlled results of the sound signature test(s) available upon request to the AEWC and the NSB DWM. The Industry Participant and/or its contractor will also provide the AEWC and the NSB DWM the preliminary analysis of that data, as well as any other applicable sound signature data that is available and that the AEWC, the NSB DWM, and the Industry Participant agree is relevant to understanding the potential noise impacts of the proposed operations to migrating bowhead whales or other affected marine mammals.

(2) Once completed the final data analysis will be provided to the AEWC and the NSB DWM upon request. The final data report for the sound source verification testing shall be provided to the NSB DWM and the AEWC no later than December 31, 2011.

(3) Any Industry Participant who prepares a model of the sound signature of its vessels and operations, whether before or after the sound signature test, will provide copies of those models and any related analysis to the AEWC and the NSB DWM upon request.

SECTION 403. MONITORING PLANS.**(a) Monitoring Plan Required.**

(1) Each Industry Participant agrees to prepare and implement a monitoring plan to collect data designed to determine the potential effects of its oil and gas operations on fall migrating bowhead whales.

(2) The Monitoring Plans shall be designed in cooperation with the AEWC, the NSB DWM, NOAA Fisheries, and the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). If additional outside review is requested by any of the above entities, the Industry Participant will evaluate the request on a case by case basis.

(b) Beaufort Sea Monitoring Plans.

In the Beaufort Sea, the monitoring plans shall include an investigation of noise effects on fall migrating bowhead whales as they travel past the noise source, with special attention to changes in calling behavior, deflection from the normal migratory path, where deflection occurs, and the duration of the deflection.

(c) Chukchi Sea Monitoring Plans.

In the Chukchi Sea, the monitoring plans should focus on the identity, timing, location, and numbers of marine mammals and their behavioral responses to the noise source. The monitoring plans will place emphasis on understanding potential impacts from industrial sounds on bowhead whales.

(d) Use of Prior Information and Peer Reviewed Data.

(1) Prior impact study results shall be incorporated into the monitoring plans prepared by each Industry Participant as applicable.

(2) Each monitoring plan for oil and gas operations shall be subject to peer review by stakeholders on a peer review panel identified by NOAA Fisheries at the 2011 Open Water Season Peer Review Meeting, convened by NOAA Fisheries. Draft plans will be submitted to the NSB DWM and AEWC no later than two weeks prior to the 2011 Open Water Peer Review Meeting.

(e) Raw Data, Communication, and Summary Required.

(1) Each Industry Participant conducting site-specific monitoring will:

(A) after quality control reviews are completed, make electronic data, available to the NSB DWM at the end of the season.

(B) permit and encourage open communications among their contractors and the AEWC and NSB DWM.

(2) Each Industry Participant will submit a summary of monitoring plan results and progress to the AEWC and NSB DWM every two weeks during the operating season.

SECTION 404. CUMULATIVE NOISE IMPACTS STUDY.

Each Industry Participant further agrees to provide its monitoring plan and sound signature data, for use in a cumulative effects analysis of the multiple sound sources and their possible relationship to any observed changes in marine mammal behavior, to be undertaken pursuant to a Cumulative Noise Impacts Study.

The study design for the Cumulative Impacts Study shall be developed through a Cumulative Impacts Workshop to be organized by the North Slope Borough in the winter of 2011/2012. The results of this workshop will be presented at the 2012 Open Water Meeting.

TITLE V – AVOIDING CONFLICTS DURING THE OPEN WATER SEASON

Industry Participants are reminded that Sections 101(a)(5)(A) and (D) of the Marine Mammal Protection Act provide, among other things, that the Secretary can authorize the incidental taking of small numbers of marine mammals of a species or population stock if the Secretary finds, among other things, that the total of such takings during the authorized period will not have an unmitigable adverse impact on the availability of such species or stock for taking for subsistence uses.

The following Operating Guidelines apply in the Beaufort Sea and Chukchi Sea, except as otherwise specified and in all cases with due regard to environmental conditions and operational safety. These Operating Guidelines are in addition to any permit restrictions or stipulations imposed by the applicable governmental agencies.

SECTION 501. GENERAL PROVISIONS FOR AVOIDING INTERFERENCE WITH BOWHEAD WHALES OR SUBSISTENCE WHALE HUNTING ACTIVITIES.**(a) Routing Vessels and Aircraft.**

(1) All vessel and aircraft routes shall be planned so as to minimize any potential conflict with bowhead whales or bowhead subsistence whaling activities. All vessels shall avoid areas of active or anticipated whaling activity (as reported pursuant to Section 202).

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- (2) Beaufort Sea. Vessels transiting east of Bullen Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.
- (3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at least five (5) miles offshore during transit.

(b) Aircraft Altitude Floor and Flight Path.

(1) AIRCRAFT SHALL NOT OPERATE BELOW 1500 FEET unless the aircraft is engaged in marine mammal monitoring, approaching, landing or taking off, or unless engaged in providing assistance to a whaler or in poor weather (low ceilings) or any other emergency situations. Aircraft engaged in marine mammal monitoring shall not operate below 1500 feet in areas of active whaling; such areas to be identified through communications with the Com-Centers.

(2) Except for airplanes engaged in marine mammal monitoring, aircraft shall use a flight path that keeps the aircraft at least five (5) miles inland until the aircraft is directly south of its offshore destination, then at that point it shall fly directly north to its destination.

(c) Vessel Speeds.

Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whalers unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(d) Vessels Operating in Proximity of Bowhead Whales.

If any vessel inadvertently approaches within 1.6 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whalers or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:

- (1) reducing vessel speed to less than 5 knots within 900 feet of the whale(s);
- (2) steering around the whale(s) if possible;
- (3) operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;

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- (4) operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and
- (5) checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.

SECTION 502. GEOPHYSICAL ACTIVITY LIMITATIONS.

The following operating limitations are to be observed and the operations are to be accompanied by a monitoring plan as set forth in Section 403 and Attachment III of this Agreement. The Industry Participants conducting geophysical activity agree to coordinate the timing and location of such activity so as to reduce, by the greatest extent reasonably possible, the level of noise energy entering the water from such activity at any given time and at any given location.

(a) Limitations on Geophysical Activity in the Beaufort Sea.

All geophysical activity in the Beaufort Sea shall be conducted in accordance with the terms set forth below.

- (1) Kaktovik: No geophysical activity from the Canadian Border to the Canning River (146 deg. 4 min. W) from 25 August to close of the fall bowhead whale hunt in Kaktovik and Nuiqsut. ¹ From August 10 to August 25, Industry Participants will communicate and collaborate with AEWC on any planned vessel movement in and around Kaktovik and Cross Island to avoid impacts to whale hunt.

¹ The bowhead whale subsistence hunt will be considered closed for a particular village when the village Whaling Captains' Association declares the hunt ended or the village quota has been exhausted (as announced by the village Whaling Captains' Association or the AEWC), whichever occurs earlier.

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- (2) Nuiqsut:
 - A. Pt. Storkerson (~148 deg. 42 min. W) to Thetis Island (~150 deg. 10.2 min. W).
 - (i) Inside the Barrier Islands: No geophysical activity prior to August 5. Geophysical activity is allowed from August 5 until completion of operations²
 - (ii) Outside the Barrier Islands: No geophysical activity from August 25 to close of fall bowhead whale hunting in Nuiqsut. Geophysical activity is allowed at all other times.
 - b. Canning River (~146 deg. 4 min. W) to Pt. Storkerson (~148 deg. 42 min. W): No geophysical activity from August 25 to the close of bowhead whale subsistence hunting in Nuiqsut.
- (3) Barrow: No geophysical activity from Pitt Point on the east side of Smith Bay (~152 deg. 15 min. W) to a location about half way between Barrow and Peard Bay (~157 deg. 20 min. W) from September 15 to the close of the fall bowhead whale hunt in Barrow.

² Geophysical activity allowed in this area after August 25 shall include a source array of no more than 12 air guns, a source layout no greater than 8 m x 6 m, and a single source volume no greater than 880 in³.

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(b) Limitations on Geophysical Activity in the Chukchi Sea.

All geophysical activity in the Chukchi Sea shall be conducted in accordance with the terms set forth below.

- (1) Beginning September 15, and ending with the close of the fall bowhead whale hunt, ³ if Wainwright, Pt. Lay, or Pt. Hope intend to whale in the Chukchi Sea, no more than two geophysical activities employing geophysical equipment will occur at any one time in the Chukchi Sea. During the fall bowhead whale hunt, geophysical equipment will not be used by Participants within 30 miles of any point along the Chukchi Sea coast. Industry Participants will contact the Whaling Captains' Associations of each of those villages to determine if a village is prepared to whale and will notify the AEWC of any response.
- (2) Safe harbor will be at sites selected by the Industry Participants and the AEWC. Safe harbor sites will be agreed upon no later than the beginning of operations and shall be listed in Attachment IV. However, a vessel captain will seek safety for his assets (vessel and personnel) as is his duty under the Law of the Sea.
- (3) Any vessel operating within 60 miles of the Chukchi Sea coast will follow the communications procedures set forth in Title II of this Agreement. All vessels will adhere to the conflict avoidance measures set forth in Section 501 of this Agreement.
- (4) If a dispute should arise, the resolution process set forth in Section 106 of this Agreement shall apply.

³ The bowhead whale subsistence hunt will be considered closed when village Whaling Captains' Associations of Wainwright, Pt. Lay, and Pt. Hope have each declared that (A) they do not intend to hunt, (B) their village hunt has ended, or (C) the village quota has been exhausted (as announced by the village Whaling Captains' Association or the AEWC), whichever occurs earlier.

SECTION 503. DRILLING AND PRODUCTION.

For exploratory drilling and production between 144 deg. W and the Canning River (~146 deg. 4 min. W), zero discharge of:

- (1) drilling fluids;
- (2) cuttings after 20" casing;
- (3) treated sanitary and gray water; and
- (4) ballast and bilge water.

(b) Drilling Operations in the Beaufort Sea East of Cross Island.

No drilling equipment or related vessels used for at-sea oil and gas operations shall be onsite at any offshore drilling location east of Cross Island from 25 August until the close of the bowhead whale hunt in Nuiqsut and Kaktovik. However, such equipment may remain within the Beaufort Sea in the vicinity of 71 degrees 25 minutes N and 146 degrees 4 minutes W., or at the edge of the Arctic ice pack, whichever is closer to shore.

(c) Drilling Operations in the Beaufort Sea West of Cross Island.

In 2011, no drilling equipment or related vessels used for at-sea oil and gas operations shall be moved onsite at any location outside the barrier islands west of Cross Island until the close of the bowhead whale hunt in Barrow.

SECTION 504. SHORE-BASED SERVICE AND SUPPLY AREAS.

Shore-based service and supply areas used by Industry Participants shall be located and operated so as to ensure compliance with the terms of this Agreement.

TITLE VI – LATE SEASON SEISMIC OPERATIONS**SECTION 601. IN GENERAL.**

Any Industry Participant who engages exclusively in geophysical activities that are conducted at least 5 miles or more from the Alaska coast in the Beaufort Sea or Chukchi Sea and begin on or after October 1, 2011 shall comply with Sections 201, 205(b), 502(a), and 602 of this Agreement.

SECTION 602. VESSEL OPERATIONS.**(a) Reporting Positions When Vessels Come Within 40 Miles of the Coast.**

(1) A vessel subject to this section operating within 40 miles of the Alaska coast shall report to the appropriate Com-Center at least once every six hours commencing with a call at approximately 06:00 hours. Each call shall report the following information:

(A) Vessel name, operator of vessel, charter or owner of vessel, and the project or entity the vessel is conducting operations for.

(B) Vessel location, speed, and direction.

(C) Plans for vessel movement between the time of the call and the time of the next call. The final call of the day shall include a statement of the vessel's general area of expected operations for the following day, if known at that time.

EXAMPLE: This is the Arctic Endeavor, operated by _____ for _____ in the Chukchi Sea. We are currently at _____ north _____ west, proceeding SE at _____ knots. We will proceed on this course for _____ hours and will report location and direction at that time.

(2) The appropriate Com-Center also shall be notified if there is any significant change in plans, such as an unannounced start-up of operations or significant deviations from announced course, and such Com-Center shall notify all whalers of such changes. A call to the appropriate Com-Center shall be made regarding any unsafe or unanticipated ice conditions.

(b) Operator Duties.

All vessel operators subject to this title are responsible for the following requirements.

- (1) Monitoring VHF Channel 16. All vessel operators shall monitor marine VHF Channel 16 at all times.
- (2) Avoidance of Whale Hunting Crews and Areas. It is the responsibility of each Industry Participant and vessel operator to determine the positions of their vessels and to exercise due care in avoiding any areas where subsistence whale hunting is active.
- (3) Vessel-to-Vessel Communication. After any vessel owned or operated by any Industry Participant has been informed of or has determined the location of subsistence whale hunting boats in its vicinity, the Marine Mammal Observer / Inupiat Communicator shall contact those boats in order to coordinate movement and take necessary avoidance precautions.

(c) Routing Vessels.

- (1) All vessel routes within 40 miles of the Alaska coast shall be planned so as to minimize any potential conflict with bowhead whales or subsistence whaling activities. All vessels shall avoid areas of active or anticipated whaling activity, as reported pursuant to Section 202.
- (2) Beaufort Sea. Vessels transiting east of Bullen Point to the Canadian border should remain at least five (5) miles offshore during transit along the coast, provided ice and sea conditions allow.
- (3) Chukchi Sea. Vessels should remain as far offshore as weather and ice conditions allow, and at all times at least five (5) miles offshore during transit.

(d) Vessel Speeds.

Vessels shall be operated at speeds necessary to ensure no physical contact with whales occurs, and to make any other potential conflicts with bowhead whales or whalers unlikely. Vessel speeds shall be less than 10 knots in the proximity of feeding whales or whale aggregations.

(e) Vessels Operating in Proximity of Bowhead Whales.

If any barge or transit vessel inadvertently approaches within 1.6 kilometers (1 mile) of observed bowhead whales, except when providing emergency assistance to whalers or in other emergency situations, the vessel operator will take reasonable precautions to avoid potential interaction with the bowhead whales by taking one or more of the following actions, as appropriate:

- (1) reducing vessel speed to less than 5 knots within 900 feet of the whale(s);
- (2) steering around the whale(s) if possible;
- (3) operating the vessel(s) in such a way as to avoid separating members of a group of whales from other members of the group;
- (4) operating the vessel(s) to avoid causing a whale to make multiple changes in direction; and
- (5) checking the waters immediately adjacent to the vessel(s) to ensure that no whales will be injured when the propellers are engaged.

(f) Marine Mammal Sighting Data.

Industry Participants whose operations are subject to this title will submit to the AEWC and NSB DWM all marine mammal sighting data.

TITLE VII – PARTICIPANTS

This Agreement shall be binding and effective when signed by the duly authorized representatives of the Participants. Signatures may be by facsimile on separate pages.

 Harry Brower
 Chairman, AEWC
 AEWC Commissioner for Barrow
 Dated: _____

 Rex Rock
 AEWC Commissioner for Pt. Hope
 Dated: _____

 Julius Rexford
 AEWC Commissioner for Pt. Lay
 Dated: _____

 Joe Kaleak
 AEWC Commissioner for Kaktovik
 Dated: _____

 Isaac Nukapigak
 AEWC Commissioner for Nuiqsut
 Dated: _____

 Rossman Peetook
 AEWC Commissioner for Wainwright
 Dated: _____

Name: _____
 Arctic Cable Company, LLC
 Dated: _____

Name: _____
 BP Exploration (Alaska) Inc.
 Dated: _____

 Name: _____
 ENI US Operating Company
 Dated: _____


 Name: *Agent and Attorney in Fact*
R. Lee Bruce
 Exxon Mobil Corporation
 Dated: 4/4/2011

Name: _____
 ION / GX Technology
 Dated: _____

Name: _____
 Pioneer Natural Resources Alaska
 Dated: _____

Name: _____
 Shell Offshore, Inc.
 Dated: _____

Name: _____
 Statoil
 Dated: _____

ATTACHMENT I

LOCAL SEARCH AND RESCUE ORGANIZATIONS - CONTACT PERSONS
(IN EMERGENCIES, ALWAYS DIAL 911)

North Slope Borough Search and Rescue (Pilots)
 Director Hugh Patkotak 852-2822 WK 852-4844 Home

Barrow Volunteer Search and Rescue Station 852-2808 OFS
 President Oliver Leavitt 852-7032 WK 852-7032 Home
 Vice-Pres. Price Brower 852-8633 WK 852-7848 Home
 Secretary Lucille Adams 852-0250 WK 852-7200 Home
 Treasurer Eli Solomon 852-2808 WK 852-6261 Home
 Coordinator Arnold Brower, Jr. 852-0290 WK 852-5060 Home
 Director Jimmy Nayakik 852-0200 WK 852-JENS Home
 Director Johnny Adams 852-0250 WK 852-7724 Home

Nuiqsut Volunteer Search and Rescue Station 480-6613 (Fire Hall)

Kaktovik Volunteer Search and Rescue Station 640-6212 (Fire Hall)
 President Lee Kayotuk 640-5893 WK 640-6213 Home
 Vice-Pres. Tom Gordon 640-
 Secretary Nathan Gordon 640-6925
 Treasurer Don Kayotuk 640-2947
 Fire Chief George T. Tagarook 640-6212 WK 640-6728 Home

Wainwright Volunteer Search and Rescue

President Joe Ahmaogak Jr. 763-2826 Home
 Vice President John Hopson, Jr. 763-3464 Home
 Secretary Raymond Negovanna 763-2102 Home
 Treasurer Ben Ahmaogak, Jr. 763-3030 Home
 Director Artic Kittick 763-2534 Home
 Director John Akpik Unlisted

Pt. Hope Volunteer Search and Rescue

Coordinator Willard Hunnicutt, Jr. 368-2774 Work
 Fire Chief Willard Hunnicutt, Jr. 368-2774 Work (Note: Only contact for Pt. Hope)

North Slope Borough Disaster Relief Coordinator

Frederick Brower 852-0284 OFS

ATTACHMENT II

VESSELS TO BE USED FOR AND IN SUPPORT OF
INDUSTRY PARTICIPANTS' OPERATIONS
AS IDENTIFIED IN SECTION 401(b)(1)(B)

[ALL VESSELS TO BE IDENTIFIED BY COMPANY]

NOTE:

COPY OF PRESENTATION OF THE INDUSTRY PARTICIPANT ATTACHED
IDENTIFYING VESSELS TO BE USED FOR AND IN SUPPORT OF THE
INDUSTRY PARTICIPANTS' OPERATIONS.

ATTACHMENT III

VESSELS TO BE USED FOR AND IN SUPPORT
OF THE INDUSTRY PARTICIPANTS MONITORING PLANS
AS IDENTIFIED IN SECTION 401(b)(1)(B)

[ALL VESSELS TO BE IDENTIFIED BY COMPANY]

NOTE:

COPY OF PRESENTATION OF THE INDUSTRY PARTICIPANT ATTACHED
IDENTIFYING VESSELS TO BE USED FOR AND IN SUPPORT OF THE
INDUSTRY PARTICIPANTS' MONITORING PLAN.

ATTACHMENT IV
SAFE HARBOR



July 11, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation, and Enforcement
Alaska OCS Region
3801 Centerpoint Drive
Suite 500
Anchorage, Alaska 99503-5820

Re: Comments on Revised Draft Supplemental Environmental Impact Statement, Lease Sale 193 Chukchi Sea

Dear Regional Director:

This letter provides comments on the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") Chukchi Sea Planning Area Oil and Gas Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement ("SEIS") (May 2011) for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 by Arctic Slope Regional Corporation ("ASRC"). These comments supplement the comments ASRC submitted on November 29, 2010, on the original Draft Supplemental Environmental Impact Statement ("Draft SEIS").

ASRC appreciates the additional steps the Bureau of Ocean Energy Management, Enforcement, and Regulation (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and we believe the SEIS rightfully determines that a very large oil spill remains highly unlikely. ASRC agrees that BOEMRE needs to take all thoughtful precautions, and we feel that this most recent SEIS appropriately concludes that development of Alaska's offshore resources subject to Lease Sale 193 in the Chukchi Sea can proceed safely.

Introduction

ASRC is an Alaska Native Regional Corporation created at the direction of Congress under the terms of the Alaska Native Claims Settlement Act of 1971 ("ANCSA"). See 43 U.S.C. § 1606. This landmark legislation extinguished Alaskan aboriginal land rights, and authorized and directed Alaskan Natives to adopt a western corporate model, managing lands, funds and natural resources. Although the western corporate model was foreign to Alaska Natives, our people were also able to manage our assets consistent with our sound stewardship and values. Under ANCSA, Inupiat Eskimos living on the North Slope in 1971 were enrolled as shareholders in ASRC. ASRC has since issued additional shares to their descendants, giving ASRC a shareholder base of approximately 11,000 Inupiat Eskimos.

Through ANCSA, Congress created ASRC and provided ASRC with the ability – and duty – to use the North Slope's natural resources to benefit Iñupiat people financially and culturally. Congress authorized ASRC "to provide benefits to its shareholders who are Natives or descendants of Natives or to its shareholders' immediate family members who are Natives or descendants of Natives to promote the health, education or welfare of such shareholders or family members." 43 U.S.C. § 1606(r) (emphasis added). Consistent with this unique legislation, ASRC is a for-profit business that is committed both to providing sound returns to our shareholders and to preserving our Iñupiat way of life, culture, and traditions.

Operating in one of the least hospitable natural climate in the world, we have built businesses to provide jobs for our people, tax revenues for our Villages and Boroughs, and cash dividends for our shareholders. At the same time, we have integrated maintenance and protection of the Iñupiat cultural and traditional practices into the ASRC business.

In carrying out its congressionally-mandated mission, ASRC and its subsidiary companies are active participants in North Slope oil exploration, development, and production. This is the source of many jobs for ASRC's Iñupiat shareholders and many contracting opportunities for ASRC's subsidiaries. This includes work as contractors in oil field developments, engineering work, maintenance of pipelines, and leasing property for exploration and development.

ASRC has historically been very concerned about Arctic OCS exploration and its effects on the subsistence activities of our communities and shareholders. Our concerns have centered around four fundamental areas:

- * Impacts to the marine mammals our culture is dependent on;
- * Impacts to the environment our marine mammals are dependent on;
- * Risks of a catastrophic oil spill that would affect our coast and communities; and,
- * Industry's ability to clean up a spill in ice-infested waters.

These comments focus on the BOEMRE's Very Large Oil Spill analysis new in the May 2011 Draft SEIS since ASRC has already commented earlier on the remand items in our November 2010 letter.

Very Large Oil Spill Analysis

ASRC is very pleased that BOEMRE has incorporated detailed Very Large Oil Spill (VLOS) analysis in the Revised Draft SEIS. As stated above, ASRC has been concerned about the potential effects of a catastrophic oil spill on our communities, our coastline and our subsistence marine mammals. We also have had questions about the ability to respond to such a spill in ice-infested waters. We applaud BOEMRE's inclusion to address this significant issue; however, there are some areas that ASRC would like to see better defined.

¹ The ASRC family of companies includes ASRC Energy Services, Inc., ASRC Construction Holding Company, LLC, Petro Star Inc., ASRC Federal Holding Company, LLC and other entities and subsidiaries.



We found the manner that BOEMRE interchanges its evaluation of a VLOS with spill response efforts (and related worst-case discharge analysis) to be somewhat confusing. ASRC acknowledges that BOEMRE's purpose in evaluating a VLOS scenario is to ensure proper analyses of impacts from a very large oil spill in the Chukchi Sea – it is not designed to serve as a basis for oil spill response planning – that is what the worst-case discharge exercise is designed for. While the BOEMRE's Revised Draft SEIS does attempt to make this distinction (page 126 of the Revised Draft SEIS), it also includes a significant discussion of oil spill response activities, albeit as a "qualitative discussion of...operational techniques." We also note that the discussion of the VLOS scenario does not take into account an operator's ability to respond immediately to an emergency that results from a well control situation while operating in the Chukchi Sea.

To avoid the confusion noted above, ASRC suggests BOEMRE more clearly distinguish the impacts analyzed in the VLOS analysis from spill response efforts and worst-case discharge analyses. We do note that BOEMRE includes the Shell spill response plan as an appendix; it is critical to point out that the Shell plan is designed for their exploration plan and not the VLOS used in the Revised Draft SEIS, and that the Shell plan represents the plan of only one operator.

Another area of concern we have is that we do not feel BOEMRE has clearly presented that the possibility that the risk of a VLOS is an event of low probability. Our concern stems from the very real potential for the general public to overreact to the impacts of a VLOS without seeing a more robust discussion in the text of the Revised Draft SEIS of the extremely low probability of such a scenario occurring. Although the Revised Draft SEIS does state in various places that a VLOS is a "low-probability, high impacts event," there is no quantitative assessment of the probability of a VLOS occurring, and the text of the Revised Draft SEIS does not include sufficient analysis or discussion of the low quantitative probability of such an event, or even a cross-reference to Appendix B, which appears to provide the statistics that should be used in that analysis. Indeed, in Appendix B, BOEMRE confirms that there have been no well control incidents in the Alaska OCS Region or Atlantic OCS Region, and that there have been a relatively small number of well control incidents in the other Regions, specifically well control incidents leading to a large spill. These statistics are further confirmation of the "low probability" status of a VLOS (Appendix B, at B-1).

While we note that the BOEMRE appropriately presents a detailed analysis of the potential impacts of a VLOS in the Revised Draft SEIS, we are very concerned that the discussion does not adequately put the risk of those impacts in appropriate context. Appendix B appears to provide the data/basis for this analysis, but it does not provide the quantitative assessment of the probability, nor is the data or information cross-referenced or summarized in the text of the Revised Draft SEIS. As a result, the public is left without a meaningful way to evaluate the likelihood of the impacts of a VLOS.

In conclusion, while the Revised Draft EIS recognizes that a VLOS in the Chukchi is a low-probability event (presumably based on OCS incident history, including in the Arctic), ASRC would like to see a more robust discussion of the low-probability VLOS issue in the text of the



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Draft Revised SEIS that would provide readers of the document a more accurate picture of the risks presented.

ASRC also recommends that Lease Sale 193 be affirmed as held in 2008. As we stated in our November 29, 2010 letter, we feel, after careful review and analysis, that the Draft SEIS provides sufficient information and analysis to support an informed decision by the Secretary of Interior affirming Sale 193.

Sincerely,

Arctic Slope Regional Corporation
Richard Glenn, Executive Vice President
Lands and Natural Resources

To: J. F. Bennett
Chief, Branch of Environmental Assessment
Bureau of Ocean Energy Management, Regulation and Enforcement
381 Eldon Street,
Mail Stop 4042
Herndon, Virginia 20170-4817

CC: Michael Heller
Community Liaison
Alaska Region Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5823

From: Aggie Frankson-Henry
P.O. Box 144
Point Hope, AK 99766

Date: June 22, 2011

RE: I am opposing the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) decision on the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221 and Beaufort Seas Lease Sale 209 and 217 and I support Alternative 1, Beaufort and Chukchi Sea No Lease Sale and opposing the National Pollutant Discharge Elimination System (NPDES) permitting program in the Arctic Multi-sale in the Beaufort Sea and Chukchi Sea Planning Areas Oil and Gas Lease Sale 209, 212, 217 and 221.

Testimony:

For the record I am Aggie Frankson-Henry a Tribal Secretary and Tribal Member of the Native Village of Point Hope. I am opposing the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) decision on the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221 and Beaufort Seas Lease Sale 209 and 217 and I support Alternative 1, Beaufort and Chukchi Sea No Lease Sale and I am opposing the National Pollutant Discharge Elimination System (NPDES) permit. A permit for discharge of toxic drilling muds and other harmful pollutants into the water within the decision of the proposed actions for a multiple sale EIS for the Chukchi Sea Sales 212 and 221 and Beaufort Seas Lease Sale 209 and 217.

As a representative for the tribe it's of best interest of: Restoring courage, stand up for our children's future and their next generation to have the opportunity to utilize our subsistence resources. This time I will stand. This time I will voice for the good in which the Inupiat people of the Arctic Slope, is currently blessed to harvest bountifully from the land, air, rivers and oceans. I am an Inupiat mother, wife, daughter, aunt, tribal member of the Native Village of Point Hope and most of all a Whaler and Harvester dependent on the Chukchi Sea and Beaufort Sea for means of survival. Being Inupiat is an inherent freedom to hunt/harvest from the vast frozen seas to nurture my family and extended families across Alaska and lower 48. The Chukchi and Beaufort Seas provides nutritional food supply on my table without any after taste of spilled debris from oil or gas exploratory drilling.



Aggie Frankson-Henry Comment

Point Hope, Alaska is surrounded by the Chukchi and Beaufort Seas. I live in the oldest whaling community in North America and our future generation historically is in jeopardy without a cleaner environment in the Arctic Slope. It is of my best interest to voice my concern to hope for the best to preserve my culture because of climate change this vast ocean is faced with. I pray for a healthier ecosystem balance for Bowhead whales, walrus, polar bears, seals, ducks, fishes, birds, crabs, plankton, oysters, clams, seaweed, worms, killer whales, narwhales, right whales, beluga whales, grey whales and all the mammals of these two great oceans that we the people of Point Hope are blessed with.

I come from an economic distress community who relies 70% on subsistence resources to maintain a healthy diet. The majority in distress is our children. Our boundary is rich in herbs, berries, plants, naturally grown dietary supplements for a healthy living environment for our people and animals that relies on these natural resources. As we the people realize today what really matters is the well being of our children's future and subsistence resources that will be impacted to strive to sustain traditional knowledge, traditional lifestyles, cultural heritage, cultural land use which industries poses a potential damage to our environment in the Arctic Slope.

The Inupiat people has political rights and we must argue that it is misleading to obstruct the settlement given to the Inupiat people by political or personal gain of regret in our backyard of the proposed 2012-2017 Outer Continental Shelf Oil and Gas Leasing Program settled by the companies permits without even giving the Inupiat the right to vote by the people of the North Slope Borough Communities.

We have the right to voice, to meet freely for the well being of the residence of the people in the coastal communities whether it be by government to government consultations meetings giving your testimonies to the entities that goes into your communities avails much to the next generation of subsistence users. No voice, no courage then you will not be heard for your inherited rights. It will cause a big effect in your community and the royalties will be dispersed to other people not from your community. The royalties will not be given to the rightful stakeholders interest or financial gain.

Community leaders I encourage you to speak up and stand up for what is only right because time is of the essence of a vast cultural effect of our future generations responsibility to maintain without probable cause the right of interest on our land and your children's rights to be I am Inupiaq freely without any restrictions on our own property to subsist on. Restoring a loving inheritance given to us by God our creator knowing that we as real people truly respect and rely on the environment for means of survival as Inupiat.

Based on current agriculture in Valdez, Alaska it is not my best interest to harm this great state with offshore oil/gas drilling along the Chukchi and Beaufort Seas. I am voicing my right to life, liberty and equality. EPA should not grant permits for discharge of toxic drilling wastes into Arctic waters from oil and gas exploratory activities to protect the fragile arctic ecosystem and traditional way of life. Global warming or climate change is a significant example of the devastation we've seen in the lower 48 by current flooding and violent storms. And a disaster in the Gulf of Mexico by human error. I believe today that we have to be very stern on how the federal government and industrial servants that is wanting to development in the brutal oceans that can lead to another disaster to our land, air, rivers, oceans that will effect or decline our subsistence resources that we rely on for means of survival thru this harsh seasons in the years ahead.

Aggie Frankson-Henry Comment

The Bureau of Ocean Energy Management, Regulation and Enforcement must conduct scientific studies before a lease sale must be proposed for a lease sale. My question is how can you clean all the oil on ice? How can you make sure that trillions of oil that may be leaked from a well be cleaned and managed in a 40-90 mile hour gusting wind? As we all know as Inupiaq people of the Arctic we cannot even think of surfing the oceans because our lives would be endangered by the great seas.

In closing stand up for our best interest by keeping the seal oil wood stove burning in our whaling camps without any worry of oil on ice debris during the harvesting of the future generations migratory land animal and marine mammals: Our Land: Our Air: Our Rivers: Our Oceans: Our Resources: Living on the land, river and oceans do not have a voice for means of survival God gave us to be nurtured by. I oppose the Chukchi Sea and Beaufort Sea Planning Areas Oil and Gas Lease Sale 209/212, 217 and 221. I support Alternative Beaufort and Chukchi Sea No Lease Sale.

Thank you,

Aggie Frankson-Henry
Aggie Frankson-Henry
Tribal Secretary

INUPIAT COMMUNITY of the ARCTIC SLOPE Comment

INUPIAT COMMUNITY of the ARCTIC SLOPE
an IRA Regional Tribal Government

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July 8, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation
and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802

Re: Comments on Revised Draft Supplemental Environmental Impact Statement for Lease Sale 193

Dear Regional Director:

The Inupiat Community of the Arctic Slope (ICAS) submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) revised draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (revised DSEIS).

ICAS is the federally recognized regional tribal government for the Inupiat people of the North Slope. ICAS represents the communities of Anaktuvuk Pass, Atkasuk, Barrow, Kaktovik, Nuiqsut, Point Hope, Point Lay, and Wainwright that depend upon Arctic marine mammals to sustain and continue a subsistence lifestyle.

The Arctic Ocean is central to our communities' cultural and subsistence traditions, and we are concerned about the potential effects of oil and gas leasing, exploration, and development on Chukchi Sea. This revised DSEIS is the second document BOEMRE has released in response to a court order directing it to reconsider its inadequate analysis of missing information about the Chukchi Sea and its marine resources and possible natural gas development in the environmental impact statement that underlay the original lease sale 193.

We support and join the comment letter submitted by Alaska Wilderness League and a number of other conservation groups on the revised DSEIS. As with the original draft SEIS that BOEMRE published in October 2010, BOEMRE continues in this revised DSEIS to refuse to meaningfully assess the missing information and the potential effects of natural gas development on the region. BOEMRE appears intent on justifying why it originally held lease sale 193 rather than meeting its obligations under the court order and under the National Environmental Policy Act.

INUPIAT COMMUNITY of the ARCTIC SLOPE Comment

The Obama Administration has repeatedly said it is committed to science-based decision-making. That includes incorporation of traditional knowledge of the Inupiat people that have lived in the Arctic and depended on its resources for millennia. The National Commission on the BP Deepwater Horizon Oil Spill, the National Ocean Policy Taskforce, and the recently released U.S. Geological Survey's report evaluating the science needs for informed energy development in the Arctic Ocean all acknowledge that many questions about the potential effects of oil and gas activities in the Arctic Ocean cannot yet be answered. For example, the U.S. Geological Survey report states in its conclusion that: "Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the spectrum from the specific subsistence animals themselves through their food chain and ecosystem." It also concludes throughout that it is critical that research into the Arctic and the effects of oil and gas activities there include local traditional knowledge. However, in the revised DSEIS, as with the original draft SEIS, BOEMRE has decided that it has no obligation to fill gaps in information before finalizing its analysis of lease sale 193. It has decided that it does not need even minimal data on things like key habitat areas for species like beluga and bowhead whales or the effects of noise and disturbance from oil and gas activities to make decisions about what areas to offer for such activities. We find this unwillingness to seek answers to fundamental questions about how oil and gas activities in the Chukchi Sea will affect the sea, its animals, and our communities deeply troubling. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of its decision.

In the revised DSEIS, BOEMRE acknowledges for the first time that a very large oil spill is possible in the Chukchi Sea as a result of oil and gas exploration and drilling. The revised DSEIS's analysis also acknowledges that a very large oil spill could have catastrophic impacts on the marine species, habitat, and Arctic communities of the Chukchi Sea region. While concluding that a very large oil spill will have devastating effects, the revised DSEIS fails to adequately acknowledge that there is no proven way to adequately clean up an oil spill there. Oil and gas development gambles our home and our way of life. Our communities will bear the ultimate consequences of an oil spill.

BOEMRE should undertake a new complete and thorough analysis of all missing information concerning the Chukchi Sea and the Arctic environment, improve its analysis of natural gas development and a very large oil spill, and reevaluate the impacts of the lease sale in light of the new information. It should also adequately describe for decision-makers and the inability to clean up an oil spill in the Arctic Ocean. It should then assess anew whether to cancel, modify or affirm the leases.

Sincerely,

Doreen Lampe
President

To: Comments on Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820



Cc: Will Anderson
 President/CEO-Koniag, Inc.

July 11, 2011

I am writing on behalf of Koniag, Inc. in support the affirmation of lease sale 193 as held in 2008. Koniag, Inc. is one of 13 regional Native corporations established by Congress under the terms of the Alaska Native Claims Settlement Act (ANCSA) to settle the aboriginal land claims of Alaska Native people. We offer the following points for consideration:

- The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.

Regards,

Charlie Powers
 Vice President Corporate Affairs

194 Almaq Drive
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Native Village of Kotzebue Comment Native Village of Kotzebue Kotzebue IRA

June 28, 2011

Regional Director
 Alaska OCS Region, BOEMRE
 3801 Centerpoint Drive, Suite 500
 Anchorage, AK 99503-5820

RE: Chukchi Sea Planning Area Oil and Gas Lease Sale 193 revised Draft SEIS

Knowledge of Language

Knowledge of Family Tree

Sharing

Humility

Respect for Others

Love for Children

Cooperation

Hard Work

Respect for Elders

Respect for Nature

Avoid Conflict

Family Roles

Humor

Spirituality

Domestic Skills

Herbivores

Responsibility to Tribe

The Native Village of Kotzebue appreciates the opportunity to comment on the recent release of the revised draft SEIS for the Chukchi Sea Oil and Gas Lease Sale 193 to address the issues specified by the U.S. District Court for Alaska in regards to insufficiencies with the original Lease Sale 193 EIS.

The members of the Tribe continue to rely on the healthy populations of fish and wildlife that use the Chukchi Sea for feeding, reproduction and overall survival. The Tribe believes that the high quality of the current environment of the Chukchi Sea provides for robust and healthy populations of marine wildlife and negative impacts on this habitat through poorly informed development, would pose an unnecessary risk to this continued quality; it is mainly for this reason that the Tribe has been undertaking and supporting continued research into the ecology of the Chukchi Sea and Kotzebue Sound. One of the main takeaways from the marine mammal research that has been occurring is how important the Chukchi Sea is for many coastal communities from Bristol Bay to Kaktovik from its central role in the lives of the marine mammals these communities depend on. While the communities directly adjacent to the lease area are the main focus of discussion of impacts it should not be forgotten that many more communities rely on this area to produce healthy marine mammals which feed their families. If major environmental impacts occur they will significantly impact many more communities than just those that are adjacent to the lease area.

To illustrate this point one only has to look at the results from the marine mammal tracking research that has occurred with the Tribes participation over the last decade. Many of the ice seals tagged in Kotzebue Sound have traveled in or near the lease area within a very short time of being released back into the Sound. In groundbreaking research the Tribe participated in with the NMML, it was shown that adult bearded seals fed in areas adjacent to the lease area for a few months during the period when there is open water and when development activities would be in high gear. An example of marine mammal uses in the area is attached in map form as part of the Tribes comments, although it should be remembered that this map demonstrates use based on an extremely small sample size in relation to the total population of marine mammals found in the Chukchi. It is reasonable to assume if you extrapolate this use out over the entire marine mammal populations that no area of water would be left to be seen and that the entire Chukchi Sea would be covered with use areas. This sample map should demonstrate how important and utilized the Chukchi Sea is to the marine mammals that Alaska coastal communities depend on for basic nutritional and cultural needs.

Unfortunately, the current level of baseline environmental information makes it very challenging, if not in the majority of cases impossible, to track changes in the environment, or harm to fish and wildlife, caused by industry during the exploration phase of the Lease 193 area. This makes it difficult to know what impacts actually occur, or may occur, or whether mitigation plans put in place are effective. The USGS recently completed a report synthesizing what is currently scientifically known about the Chukchi Sea environment, and this report should be used to reevaluate the conclusions drawn by the BOEM during the entire lease 193 processes on whether certain information is relevant to potentially significant effects and whether the information is essential to making a reasoned choice.

333 Shore Avenue • P.O. Box 296 • Kotzebue, Alaska 99752
 Phone: (907) 442-3467 • Fax: (907) 442-2162

Native Village of Kotzebue Comment

While the Tribe concurs with the court that it is important to address the environmental impacts of natural gas development and a VLOS and the BOEM attempts to do this in the revised draft SEIS, without a sufficient level of understanding of the ecological processes in place it is unlikely that this NEPA process will be sufficient to inform sound mitigation strategies for the many and varied environmental impacts likely to occur.

NOAA chief Jane Lubchenco summed up this concern well in a June 21, 2011 article in the Anchorage Daily News, when she stated, "we have relatively little understanding of the true vulnerabilities of most Arctic ecosystems to the kinds of changes that are under way now," she said. "And there's a very urgent need to acquire additional information to be making better decisions." She added that development decisions should be made cautiously, "because of the potential for either irreversible changes, or changes that would take a long, long time to undo."

On the practical side, other federal agencies (NOAA and the Coast Guard in particular) have recently expressed concern about the lack of necessary infrastructure in place (including ice breakers, port sites, staging areas, and logistics involving response personnel housing and bases), or the ability of the agencies to provide critical data such as weather and ice forecasting. In what appears to be every area of needed capacity for the federal government to effectively manage development, or respond to a spill event in the Chukchi Sea, concern has been expressed by the agencies over the lack of preparedness. This situation does not lend itself to increasing the confidence of the Tribe that exploration and development of the Lease 193 area can currently occur in a manner protective of the environment.

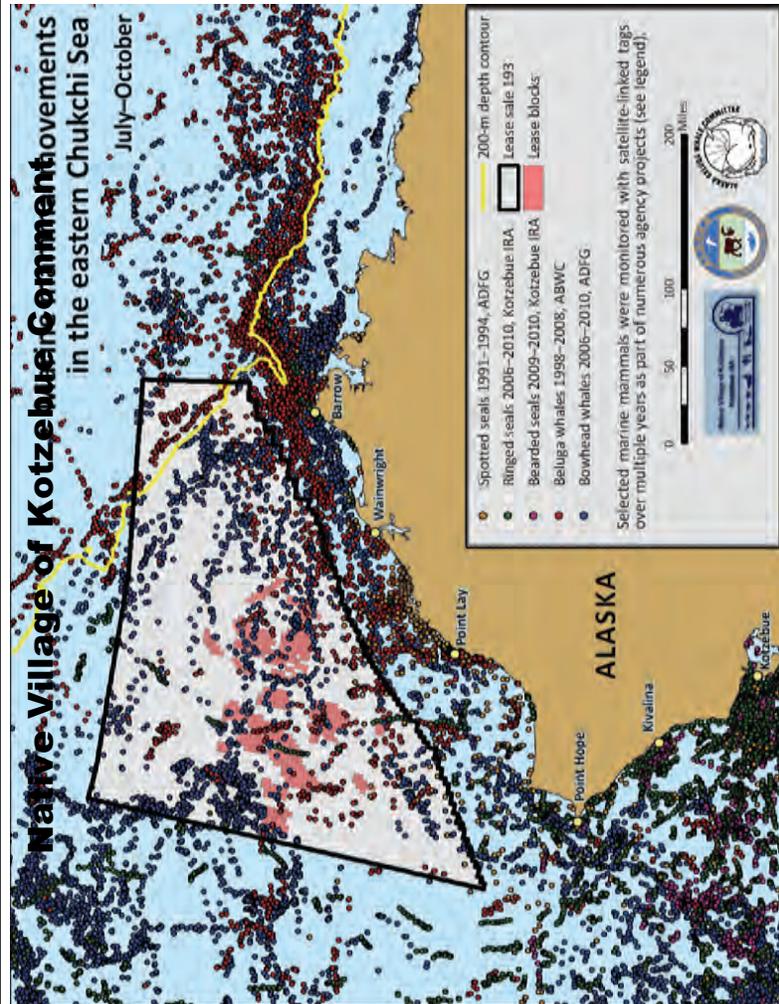
In order to meet this need there must be an ongoing commitment from the Administration and Congress to aggressively fund and seek to increase the capacity of the federal government to effectively manage Arctic OCS development. Slogans and rhetoric are clearly absurd as a way to support offshore energy production - putting money where the mouth is - would be the only responsible way forward. This of course is not off topic, but instead very much germane to the matter before us in the VLOS scenario put forward in this document - that is the question of whether the federal agencies could even respond to such an event. While BOEM and other federal agencies have to rely on budgetary priorities put forward by Congress and the Administration they can be proactive by making it known at every opportunity possible that federal capacity must be increased for managing Arctic OCS development.

All sides of the debate over offshore development speak about the commitment to "responsible development," however it seems that the responsible part of this equation was allowed to atrophy in recent years. The BOEM is the first line of defense in assuring that exploration and development of the Chukchi Sea oil and gas is done in the most responsible and protective manner possible and we hope that it has learned many lessons over the course of the last year and will recommit to the Nation that it is first and foremost committed to putting the RESPONSIBLE back into development.

Thank you for your consideration.

Alex Whiting
 Environmental Specialist

Noah Naylor
 Executive Director





Native Village of Point Hope
P.O. Box 109
Point Hope, Alaska 99766
(907) 368-2330
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July 11th, 2011

VIA FEDERAL ERULEMAKING PORTAL

Regional Director
Bureau of Ocean Energy Management, Regulation
and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802

Re: Comments on Revised Draft Supplemental Environmental Impact Statement for Lease Sale 193

Dear Regional Director:

The Native Village of Point Hope submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) revised draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (revised DSEIS).

The Native Village of Point Hope is a federally recognized tribal government that is responsible for the well being of its members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life by hunting bowhead whales, walrus, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, groceries must be flown in and are extremely expensive, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean suffers, so will the physical health of our people. Hunting is also central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.

We are gravely concerned about the potential effects of oil and gas development on the Arctic Ocean. We are worried that BOEMRE is not taking its job seriously with respect to Chukchi Sea Lease Sale 193. Instead of working to gather information needed to fully assess the potential effects of the lease sale and fully inform our community about those effects, BOEMRE seems to be rushing ahead to justify a decision it has already made. The revised DSEIS is the second document BOEMRE has issued in response to a court order directing the agency to redo its analysis of missing information about the Chukchi Sea and possible natural gas development. However, as with the original draft SEIS in October, BOEMRE refuses to meaningfully assess missing information about the Arctic Ocean and its marine resources and the potential effects of natural gas development on the region. It is as if BOEMRE intends to justify why it originally held lease sale 193 rather than meet its obligations under the court to improve its analysis and reconsider the decision in the face of that new analysis. We are encouraged that BOEMRE has now for the first time admitted that a very large oil spill is possible in the Chukchi Sea from oil drilling. But the analysis contained in the revised DSEIS is confusing and does not give a clear picture of what an oil spill would look like or how it would affect our Ocean and coasts. For example, it does not tell us what the oil plume would look like, and it only gives big ranges of the amount of the coast that would be covered if there were an oil spill. We urge BOEMRE to complete an analysis that addresses these shortcomings and provides a clearer picture of the consequences of a large oil spill. We also urge BOEMRE to discuss more deeply the shortcomings of oil spill response in the Arctic Ocean, with its harsh and remote conditions.

The Obama Administration has repeatedly said it is committed to science-based decision-making. Many agencies have acknowledged that many questions about the potential effects of oil and gas activities in the Arctic Ocean cannot yet be answered. Most recently, the U.S. Geological Survey issued a detailed report of all that is still unknown. Of deep concern to us, the report concluded that: "Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the spectrum from the specific subsistence animals themselves through their food chain and ecosystem." We urge BOEMRE to get this information—including by seeking local traditional knowledge—before making decision that put our community at risk.

We support and join the more detailed comment letter submitted by Alaska Wilderness League and a number of other conservation groups on the revised DSEIS.

Sincerely,

s/ Caroline Cannon
Caroline Cannon
Native Village of Point Hope

Page 1 of 1

PUBLIC SUBMISSION

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Comments Due: July 11, 2011
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Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0062
Comment from Kevin Eischens, UMIAQ

Submitter Information

Name: Kevin Eischens
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3820 Remington Circle
Anchorage, AK, 99518
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Organization: UMIAQ
Government Agency Type: Tribal

General Comment

I am writing in response to the OCS Lease sale 193. I am urging that the lease sale be affirmed as held in 2008. I believe this lease sale is critical to the long term energy security and economic stability of our nation. With the demand for energy on the rise the U.S. should develop and secure more of its own oil and gas resources. This OCS Lease sale would go along ways in securing our nations Energy Independence!

July 11, 2011

Mr. James Kendall
Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
301 Centerpoint Drive Suite 500
Anchorage, Alaska 99503-5820

Re: Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Revised Draft Supplemental Environmental Impact Statement

Dear Mr. Kendall:

The State has reviewed the Revised Draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193. The nation, State, communities, and Alaskans have a tremendous stake in the timely progress and successful completion of leasing, exploration, and development of the Arctic OCS. In a study conducted by the University of Alaska Anchorage Institute of Social and Economic Research (ISER), the U.S. economy would see an addition of 54,000 annual jobs, peaking at over 91,000, with a \$145 billion payroll over a 50-year period as a result of Alaska OCS development. *Potential National Level Benefits of Alaska OCS Development, p.ES-1, February, 2011.* Development of the OCS would generate approximately \$193 billion in government revenue. *Id.*

OCS development is a prime source of the continued health and diversity of our onshore oil industry as well. Production from the OCS has several indirect effects including lower pipeline tariffs, extending the life of the TAPS pipeline, a more robust and lower cost service industry, and longer-lived onshore facilities.

Development of the OCS would also greatly help secure our nation's energy needs. Studies estimate that the Alaska Arctic has more undiscovered oil than any Arctic nation. These studies estimate that the OCS contains 27 billion barrels of conventional oil and 132 trillion cubic feet of natural gas. Studies have also shown that Alaska's Beaufort and Chukchi Sea development could result in the production of 700,000 barrels of oil per day for 40 years, in-turn supplying more jobs, incomes, and energy for our state and nation, lowering our nation's trade deficit, and helping to meet President Obama's goal of reducing the nation's reliance on foreign oil. "Meeting this new goal of cutting our oil dependence depends largely on ... finding and producing more oil at home, and reducing our dependence on oil with cleaner alternatives fuels ..." Speech at Georgetown University, March 29, 2011.

The Revised Draft SEIS relies on the existing analysis provided by the Chukchi Sea 193 Final EIS, but adds (1) new analysis on environmental impacts of natural gas development, (2)

"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans"

evaluates incomplete, missing, or unavailable information pursuant to 40 CFR 1502.22 (Appendix A), and (3) analyzes a hypothetical very large oil spill (VLOS) scenario.

It is apparent from our review of the Revised Draft SEIS that BOEMRE has addressed the court's and the public's concerns in a comprehensive manner. We urge the Secretary to affirm Lease Sale 193 without delay. The State of Alaska submitted comments supporting the Draft Supplemental EIS for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193 on November 29, 2010 recognizing BOEMRE's quality analysis of environmental impacts from natural gas development as well as their approach and methodology in addressing what was claimed "missing information" from the Lease Sale 193 Final EIS. Any reference made to the Alaska Coastal Management Program (ACMP) in the portions of the document that were originally included in the Draft Supplemental EIS should be removed considering that program met its statutory sunset date as of July 1, 2011. We provide additional comments below that specifically address the inclusion of the VLOS scenario, as well as cite where there is specific mention of Alaska's ACMP program that should be rewritten or deleted from the text.

- Chapter I, I.A. Background, page 2:** A Very Large Oil Spill (VLOS) is described as being greater than 150,000 bbls. The scenario described later in Chapter 4 describes a Very Large Oil Spill with a high flow rate over a 74 day period which would yield a total spill volume of 2,160,200bbls. Since these two volumes differ by a substantial order of magnitude, BOEMRE should provide an explanation of (1) the definition of a Very Large Oil Spill and (2) the volume of the Very Large Oil Spill being considered in the Chukchi Lease Sale 193 scenario. This explanation could avoid confusion on what volume is being considered when a Very Large Oil Spill is being discussed.
- Chapter I, I.D.3 Land Use and Coastal Management, page 6:** This section will need to be rewritten since Alaska no longer has an approved coastal management program following the sunset date of July 1, 2011. An explanation could be added to paragraph one and paragraphs two and three could be deleted.
- Chapter I, I.D.4 Notices and Information Provided to Lessees, page 8:** References to consistency with the Alaska Coastal Management Program should be removed.
- Chapter I, I.D.4 Notices and Information Provided to Lessees, page 9:** As noted earlier, references to consistency with the Alaska Coastal Management Program should be removed.
- Chapter I, I.F.2 Exploration Plans, and Development and Production Plans, page 11, paragraph one:** References to the state's Coastal Zone Management Plan should be removed. Discussion of the adequacy of the oil spill response plan should include on-shore impacts due to a Very Large Oil Spill (VLOS) scenario.
- Chapter I, I.F.3 Pipeline Regulations, page 11, paragraph one:** It should be noted in this paragraph that there may be State of Alaska standards /regulations that come into play when the OCS pipeline ties into on-shore facilities, pump stations, or pipelines.

Alaska Department of Natural Resources Comment

July 11, 2011
Page 3 of 5

7. Chapter IV, IV.D.1. Background, Government Reports and Recommendations, page 123: The section on the Council on Environmental Quality (CEQ) quoted from a report that reviewed MMS (now BOEMRE) NEPA policies, recommending that BOEMRE "ensure that NEPA documents provide decision makers with a robust analysis of reasonably foreseeable impacts, including an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf." This statement appears to conflict with the description of the hypothetical reservoir in Appendix D, page D1, paragraph two. The description in Appendix D discusses a hypothetical reservoir that has characteristics that drive high flow rates, but the scenario specifically notes that it does not consider whether the hypothetical reservoir could actually contain oil. It is not clear from this description whether the VLOS is a "reasonably foreseeable impact" or a "remote and speculative impact" as defined by NEPA. If the description could provide examples of analogous reservoirs in other areas that have similar geological characteristics and had oil present, that would make this hypothetical scenario much clearer. The Oil Pollution Act of 1990 has the responsible party taking precautions against foreseeable acts, so it should be made clearer that this VLOS discharge volume is being calculated solely for the purposes of determining the environmental effects of an uncontrolled oil well blowout and that it has no direct relationship to the worst case discharge considered in exploration plan scenarios. Furthermore, it should be noted, and to help better clarify and describe whether the VLOS scenario is a "reasonably foreseeable impact" or a "remote and speculative impact", that at the present Preliminary Draft SEIS and prospective leasing stage of the Chukchi Sea Oil and Gas Lease Sale 193, information on what the associated oil or gas reservoirs may produce during a VLOS are inherently speculative, with the possibility to be better understood once exploration and seismic testing of the purchased oil and gas leases are actually completed. This leasing stage is then followed by multiple permit applications and a thorough review and approval of associated plans, not to exclude the approval of worst case discharge considerations included in exploration plan scenarios.

8. Chapter IV, IV.D.2 Very Large Oil Spill (VLOS) Scenario, page 130, paragraph two: This paragraph includes a discussion of spill response efforts contained within an exploration plan. It should be explained more clearly in this section that the Very Large Oil Spill (VLOS) scenario discussed in this section is not the same as the worst case discharge contained in an exploration plan's oil discharge prevention and contingency plan (ODPCP). It could be worthwhile to summarize the Worst Case Discharge (WCD) discussion on page 126 here.

9. Chapter IV, IV.D.2. Very Large Oil Spill (VLOS) Scenario, page 136: The final sentence on this page notes that "for the purposes of this analysis, effectiveness of response techniques is not factored into the spill volume posited by this scenario and considered during OSRA modeling." This factor should be made more clear in the discussions of the duration of the spill volume of the spill on pages 130-131 and the discussion of the volume of oil reaching shore on pages 132-133, rather than being mentioned at the end of the discussion.

10. Chapter IV, IV.E.2, Water Quality, page 148: The discussion of drilling a relief well discusses the USEPA NPDES Arctic General Permit for Oil and Gas Exploration. It should be noted that this permit is currently undergoing renewal and in the future there will be separate NPDES permits for the Chukchi Sea and the Beaufort Sea.

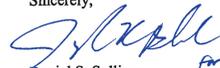
Alaska Department of Natural Resources Comment

July 11, 2011
Page 4 of 5

- Chapter VI, VI.C.4 CZMA Consistency Review, page 303:** This paragraph should be revised to include a note that the Alaska Coastal Management Program ceased on July 1, 2011.
- Appendix B, page B9, paragraph 2:** The discussion of factors not explicitly considered by the oil spill risk analysis (OSRA) model should be moved to the introductory section for 4.1 Conditional Probabilities in order to make it more clear to the reader from the outset how the OSRA model works.
- Appendix B, pages B6-B9:** The trajectory models discussed in this section are based on the oil staying in the water for 30 days. It should be made clearer that this scenario is based on a hypothetical situation where spill response is ineffective or unavailable. Alaska's spill response standards require the responsible party to plan for containing or controlling the spill within 72 hours. These models appear to allow the oil to continue spilling and spreading unabated. These trajectory models should make it clear that this is a hypothetical scenario to determine the environmental effects of an uncontrolled oil well blowout and that allowing oil spill and spread unabated would not be allowed within state waters or if the oil spill was forecast to impact state waters or shorelines.
- Appendix D page D1, Description of Relief Well Model:** The length of the well blowout is based upon worst case travel time for a second drill rig to mobilize from outside the theatre of operations. It should be noted in this section that Notice to Lessees (NTL) No. 2010-N06 requires an application for permit to drill (APD) to contain information on the availability of a rig to drill a relief well and rig package constraints. It further requires the application to specify as accurately as possible the time it would take to contract for a rig, move it onsite, and drill a relief well. It should be made clearer in this section that regulatory standards exist that could prevent or mitigate an oil spill and that this hypothetical scenario assumes that everything that could go wrong, would go wrong.

In closing, amidst the additional comprehensive assessment of parameters included within this Revised Draft SEIS for the Chukchi Sea Oil and Gas Lease Sale 193, as well as the instances included in the previous Draft SEIS, the State concludes that the Revised Draft SEIS for Chukchi Lease Sale 193 provides more than sufficient support for the Secretary to affirm the Chukchi Lease Sale 193. It is well past time for lease holders to proceed to the next phase of exploration. Thank you for the opportunity to provide comments on the Revised Draft SEIS.

Sincerely,



Daniel S. Sullivan
Commissioner

CC: Michael Bromwich, Director, Bureau of Ocean Energy Management, Regulation and Enforcement
John Goll, Regional Director, Bureau of Ocean Energy Management, Regulation and Enforcement
Randy Ruaro, Deputy Chief of Staff, Office of the Governor
John Katz, Director of State & Federal Relations, Office of the Governor
Daniel Sullivan, Commissioner, Department of Natural Resources
Joseph Balash, Deputy Commissioner, Department of Natural Resources
Ed Fogels, Deputy Commissioner, Department of Natural Resources
Thomas Craford, Director DNR, Office of Project Management and Permitting
William Barron, Director DNR, Division of Oil and Gas



REPRESENTATIVE MIA COSTELLO

Member: House Finance Committee

July 8, 2011

James Kendall, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall:

As a Representative in the Alaska State House and life-long Alaskan, I want to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to affirm Lease Sale 193 and expedite permit approvals without further delay.

I believe we need to act now; we have sufficient information to conduct this exploration safely and efficiently. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.

And while understandable and prudent that we proceed with caution, drilling in the Outer Continental Shelf offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is substantially greater than in Alaska's shallow water drilling areas. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEMRE to conclude that exploration can and should move forward in the Chukchi.

The original directive of Lease Sale 193 in 2008 was to produce oil from the Alaska OCS and boost domestic production from our world-class energy deposits. OCS production could potentially refill the TransAlaska pipeline, a crucial point now that the pipeline is operating at only one-third of its 1988 peak flow. The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place and considered to be the most prospective unexplored offshore basin in the country.

Given the continuing demand for energy and the impact of high energy prices on American citizens and their economy, the U.S. has a duty to develop all domestic energy sources, both onshore and offshore. Allowing Lease Sale 193 to move forward will help alleviate these problems and protect the United States from unpredictable events across the globe and ensure our energy stability in the long term.

Sincerely,

Rep. Mia Costello
Alaska State House, District 27

Session: Tel: 907-465-4968 Alaska State Capitol, Juneau AK 99801 FAX: 907-465-2040
Interim: 716 W. 4th Ave., Anchorage, AK 99501 Tel: 907-269-0117 FAX: 907-269-0111 1-800-773-4968
Rep.Mia.Costello@legis.state.ak.us

Page 1 of 2

**Alaska State Legislature**

Senator Hollis French
716 West 4th Avenue, Suite 420
Anchorage, AK 99501

July 8, 2011

Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Dear Mr. Kendall,

I am writing to express my support for OCS oil exploration. I have some concerns about the proposal, of course, which I will describe below. First, a few words on my background: before coming to the legislature I worked a dozen years in the oil industry, principally as a production operator, including five years on an offshore rig in Cook Inlet as a Shell Oil employee. Indeed, during those years I helped with an oil spill clean-up exercise conducted in the Beaufort Sea in broken-ice conditions in conjunction with Shell's proposed Seal Island development.

My support for Shell's current venture is thus informed by a better-than-average familiarity with the reality of oil exploration and development. (I have no financial interest whatsoever in the company).

The issues I would like to see addressed during the permitting process are as follows:

- There must be a strong Coast Guard presence in the Beaufort and Chukchi seas
- Drilling should take place only in open water conditions and be shut down in the event of an ice incursion
- The containment dome Shell proposes should be tested on site
- Local knowledge should be incorporated at every step
- Independent qualified Marine Pilots should be required for transiting vessels through Alaska waters
- Though there is no longer a requirement that federal permitting be consistent with state law, given the loss of Alaska's Coastal Management Program, consistency should still be the goal, especially in terms of pollution/spill monitoring and cleanup.

Though I recognize that it is not a permitting function, I would also advocate for raising the spill liability levels beyond the current federal limit of \$75 million.

Thank you for considering these comments.

Sincerely,

Senator Hollis French

Senator Cathy Giessel Comment**PUBLIC SUBMISSION**

As of: July 25, 2011
Received: June 27, 2011
Status: Posted
Posted: July 01, 2011
Tracking No. 80eb4f47
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0006
Comment from Cathy Giessel, Senate District P

Submitter Information

Name: Cathy Giessel
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Anchorage, AK, 99501
Email: senator_cathy_giessel@legis.state.ak.us
Phone: 907-269-0181
Fax: 907-269-0184
Organization: Senate District P

General Comment

Alaska's Constitution was ratified by our citizens. It was also supported by the Alaska Statehood Act that was approved by Congress and signed by the President. As an elected legislator in the Alaska Senate, I have sworn to uphold the United States and State of Alaska Constitutions. Both the Statehood Act & the Alaska Constitution presume development of our natural resources. New oil from state and federal lands is essential to keep the TransAlaska Pipeline System (TAPS), Alaska's economic lifeline, viable. TAPS is also an economic, petroleum resource and jobs lifeline for all America. Areas of the Beaufort and Chukchi Seas are under lease. Those leased areas need to be explored and produced now.

As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

Respectfully,

Senator Cathy Giessel

Attachments

BOEMRE letter lease sale 193

Senator Cathy Giessel Comment
ALASKA STATE LEGISLATURE714 W 4th Avenue
Suite 200
Anchorage AK 99501-2133State Capitol
Juneau AK 99801-1182
907-465-4843
Fax: 907-465-3871
800-892-4843Senator Cathy Giessel
Senate District P

June 27, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503**Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea**

Dear Mr. Kendall,

Alaska's Constitution was ratified by our citizens. It was also supported by the Alaska Statehood Act that was approved by Congress and signed by the President. As an elected legislator in the Alaska Senate, I have sworn to uphold the United States and State of Alaska Constitutions. Both the Statehood Act & the Alaska Constitution presume development of our natural resources. New oil from state and federal lands is essential to keep the TransAlaska Pipeline System (TAPS), Alaska's economic lifeline, viable. TAPS is also an economic, petroleum resource and jobs lifeline for all America. Areas of the Beaufort and Chukchi Seas are under lease. Those leased areas need to be explored and produced now.

As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

Respectfully,

Senator Cathy Giessel

Senator_Cathy_Giessel@legis.state.ak.us
<http://www.aksenateminority.com/>

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JEANNE HADDAWAY-RICCO
Legislative District 37
Candice, Dierkes, Talbot,
and Wisconsin Counties
—
Ministry Wife
—
Economic Matters Committee
Joint Committee on Federal Relations
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Fax 410-832-8719MARK R. HONADEL
STATE REPRESENTATIVE • 21ST ASSEMBLY DISTRICT

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage, AK 99503-5820**Re: Revised Draft Supplemental Impact Statement for Lease Sale 193**

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Mark Honadel
Wisconsin State Representative

Working For You!

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July 7, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
C/O Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820**Re: Revised Draft Supplemental Impact Statement for Lease Sale 193**

Dear Mr. Kendall,

I am writing to express my strong belief that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) should move forward with the approval of Lease Sale 193.

We would all agree that since the passage of the Outer Continental Shelf Lands Act nearly six decades ago, government agencies such as BOEMRE have provided an invaluable service to the long-term accountability of the resources possessed in Alaska's Outer Continental Shelf (OCS). This service has been provided by due diligence paid to the economic, environmental, and equity issues raised by the exploration and production of our natural resources. I feel strongly that Lease Sale 193 would be another positive chapter in this history.

The American government faces three critical crises at present that Chukchi Sea oil and gas production could help alleviate. First, energy prices continue to rise and will steadily do so as long as a legitimate stream of domestic production is not provided. In addition to the abundance of natural gas that can be found in OCS, it is estimated that 27 billion barrels of oil exist, providing both long and short term benefits to American consumers. Second, the American economy is sputtering due to the lack of a healthy job market, while burgeoning national debts are putting weight on our recovery. Lease Sale 193 would create thousands of jobs and inject billions of dollars in revenue that could help us retire a portion of this debt. Third, our nation is continuously under threat from petro-tyrants in unsettled parts of the globe that use our energy consumption to fund their regimes. This situation has been made even more unstable by recent events throughout the Middle East, most notably in Egypt and Libya. We need to expedite national energy production; Lease Sale 193 would accomplish this.

Even with these benefits in place, I recognize that any time energy production is proposed in these regions environmental and societal concerns must be weighed. I would offer, however, that Lease Sale 193 has been properly vetted on these fronts and the May 20th Supplemental Impact Statement should be approved. The final phase of this process is public comment in order to ascertain societal impact; upon its positive completion, I would recommend approval.

I would like to reiterate my strong belief that you should move as quickly as possible to approve Lease Sale 193 and allow its positive impacts on our economy, energy prices, and national security to be realized.

Sincerely,

Jeanne Haddaway-Ricco

ALASKA STATE LEGISLATURE

Interim:
The West 4th Avenue
Anchorage, Alaska 99501-2133
Phone: (907) 269-0199
Fax: (907) 269-0197
Senator_Kevin_Meyer@legis.state.ak.us



Session:
Alaska State Capitol
Juneau, Alaska 99801-1102
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Toll Free: (888) 465-4915

SENATOR KEVIN MEYER
MAJORITY LEADER

June 23, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

As an elected legislator in the Alaska Senate, I swore an oath to uphold the Constitutions of both the United States and State of Alaska. Both the Alaska Statehood Act & the Alaska Constitution presume development of our natural resources. Specifically, Article 8, Section 1 of the Alaska Constitution requires the "development of its resources by making them available for maximum use consistent with the public interest."

New oil from state and federal lands is essential to keep the Trans-Alaska Pipeline System (TAPS), viable and operational. TAPS is the main lifeline for Alaska's citizens, over 80% of the State budget is dependent upon revenue from oil and gas.

Continued decline in production will threaten the viability of TAPS if new production does not come on-line. Areas of the Beaufort and Chukchi Seas are under lease. Those leased areas need to be explored and produced now.

As an Alaska State Senator, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

Respectfully,

K. Meyer
Senator Kevin Meyer
Alaska State Senate Majority Leader



Alaska Legislature
Representative Charisse Millett



Session:
State Capitol Building, Room 13
Juneau, AK 99801
Phone (907) 465-3879
Fax (907) 465-2069
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District 30

July 1, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

Your agency is preparing the Revised Draft Environmental Impact Statement for Lease Sale 193 in the Chukchi Sea. I urge you to affirm the lease sale so environmentally responsible oil and natural gas development can begin as soon as possible.

While I applaud and encourage efforts to develop alternative and renewable forms of energy, the fact remains that our country will have to rely on non-renewable energy sources for decades to come.

Alaska's Chukchi Sea OCS is the most promising unexplored offshore basin the United States. It holds up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas. That amount of oil can refill the Trans-Alaska Pipeline and energize the country with tens of thousands of new jobs and billions of dollars in new revenue for decades to come.

OCS development will also help heal the country's spiraling debt crisis. The federal government stands to collect an estimated \$167 billion in new revenue.

Now is not the time to rely on foreign countries like Brazil to meet our future energy needs. It is time to meet our energy needs with plentiful and safe domestic oil and gas reserves.

Sincerely,

Charisse Millett

Rep. Charisse Millett

Senator Linda Menard

Session
State Capitol, Room 9
Juneau, Alaska 99801
Phone: (907) 465-6600
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Wasilla, Alaska 99654
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Alaska State Legislature

June 27, 2011

Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Support Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall,

As an Alaska state senator, I urge the Bureau of Ocean Energy Management, Regulation and Enforcement to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay.

It is no secret that new oil from state and federal lands is essential to keeping the Trans-Alaska Pipeline System (TAPS) alive and viable. The TAPS pipeline is the lifeblood of our state, and crucial to America as a whole. Areas of the Beaufort and Chukchi Sea are under lease to private companies, and those areas need to be explored and produced now. Alaska's Constitution, ratified by our citizens and supported by Congress and President Dwight Eisenhower through the Alaska Statehood Act, presumes the development of our natural resources. As an elected official, I've sworn to uphold the United States Constitution and the Alaska Constitution, and I believe the development of our natural resources for the benefit of all falls in line with that oath.

Again, I urge BOEMRE to affirm the Lease Sale 193.

Sincerely,

Linda Menard
Senator Linda Menard

Senator_Linda_Menard@legis.state.ak.us





ALASKA STATE LEGISLATURE

SENATOR THOMAS H. WAGONER,
Co-Chair: Senate Resources Committee
Member: C&RA Committee Member: LB&A Committee
Member: Regulatory Review Member: World Trade

Session: January - May
State Capitol, #427
Juneau, AK 99801
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Interim: May - December
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Kenai, AK 99611
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ALASKA STATE LEGISLATURE



Session:
State Capitol, Room 406
Juneau, AK 99801-1182
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REPRESENTATIVE PEGGY WILSON
HOUSE DISTRICT 2

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
3801 Centerpoint Drive, Ste. 500
Anchorage, AK 99503

July 1, 2011

Re: Support for Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall,

As an Alaska State Representative and Vice-Chair of the House Resource Committee, I strongly urge the Bureau of Ocean Energy Management, Regulation & Enforcement to affirm Lease Sale 193, and expedite permit approvals that allow exploration and development of Alaska's resources.

New oil from state and federal lands is essential to the nation's future energy supply, as we strive to become less dependent on other nations for the oil and gas that keeps our country running. As stated by Rebecca Watson, attorney for the Western Energy Alliance, "These are resources held by the American people and they are meant to be developed for the good of the American people."

An important part of the nation's interconnected energy system is the Trans Alaska Pipeline System (TAPS). TAPS is an incredible asset that is not only Alaska's economic lifeline; it has also served as a lifeline for oil and jobs to the lower 48 for over thirty years. But the pipeline needs to have a continuing supply of oil and gas to keep it viable. Alaska has the oil and gas to fill the pipeline again and provide for the country's energy needs.

Shell has spent more than \$3 billion on its Arctic exploration program so far, including over \$2 billion in payments to the government for leases in the Chukchi Sea. The company stands ready to deploy the most robust Arctic oil spill response system known in the industry and has shown that their oil spill response capability meets or exceeds worst-case discharge volume for the proposed wells. Those leased areas need to be explored and energy produced for America now.

Kindest Regards,

Representative Peggy Wilson
House District 2
Alaska State Legislature

DATE: July 11, 2011
TO: Regional Director, BOEMRE; Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
FROM: Senator Tom Wagoner, Alaska State Senate
RE: Comments on Revised Draft SEIS - Lease Sale 193 Chukchi Sea

This is purposely short and to the point.

1. Affirming Lease Sale 193 is supported by the SEIS information and analysis.
2. Alaska's economy and the nation's long-term energy solutions need Lease Sale 193 to go forward.
3. The Chukchi OCS has substantial potential and is huge unexplored national basin.
4. Alaska's North Slope has been massively studied and Alaska's permitting structure requires safeguards so that exploratory and development activities will have minimal environmental impacts, including species impacts.
5. America must develop our domestic energy sources and lessen the stranglehold of foreign sources.

I support Lease Sale 193, as held in 2008, and ask that this be included as public comment to NOT rescind the leases and allow development in this area.



June 6, 2011

ADMINISTRATION DEPARTMENT

City of Guadalupe
918 Obispo Street
Guadalupe, CA 93434
Tel (805) 356-3891
Fax (805) 343-5512



James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for an oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, please finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is stated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is important for the BOEMRE to allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela places the United States at risk for disruptions in supply and price spikes.

Sincerely,
[Signature]

Regan M. Candelario
City Administrator
City of Guadalupe

918 Obispo Street, Guadalupe, CA 93434 • (805) 343-1340 • Fax (805) 343-5512

Mayor Northwest Arctic Borough Comment

NORTHWEST ARCTIC BOROUGH

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July 6, 2011

James Kendall, PhD
Regional Director, Alaska Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Dr. Kendall:

The Northwest Arctic Borough (Borough) submits the following written comments regarding the Revised Draft Supplemental Environmental Impact Statement (SEIS) addressing Outer Continental Shelf (OCS) Oil and Gas Lease Sale 193, Chukchi Sea, Alaska. The Borough's comments are provided per the Notice of Availability announcing the Revised Draft SEIS published in the Federal Register on May 27, 2011.

Addressing the proposed action, the Revised Draft SEIS augments the analysis of the Sale 193 Final Environmental Impact Statement (FEIS) to address the District Court's remand to address issues related to impacts of natural gas development and missing information. In response to comments on the draft SEIS, BOEMRE has included an analysis of the potential environmental impacts of a very large oil spill in the revised draft SEIS. The sale area encompasses approximately 6,156 whole and partial blocks (about 34 million acres) within the Chukchi Sea portion of Alaska's OCS.

In the 2007-2012 Five-Year OCS Oil and Gas Leasing Program, the Secretary of the Interior excluded from the sale a corridor (buffer) located offshore in the vicinity of Point Hope, Point Lay, Wainwright, and Barrow near the State of Alaska's northwest coast. The corridor, located at a distance of up to approximately 50 miles from shore, includes a polynya or spring lead system.

The BOEMRE did not identify any additional alternatives for the scenarios discussed in the SEIS. The alternatives analyzed in the Sale 193 FEIS are carried forward for consideration in the

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Mayor Northwest Arctic Borough Comment

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Revised Draft SEIS. The Revised Draft SEIS relies on the existing analysis provided by the Sale 193 FEIS where appropriate and adds new analyses with respect to the District Court's concerns instructing BOEMRE to:

- 1) Analyze the environmental impact of natural gas development;
2) Determine whether missing information identified by BOEMRE in the Sale 193 FEIS was essential or relevant under 40 CFR 1502.22; and
3) Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

The Borough's mission is to improve the quality of life for all residents, and its vision is to be a unified region of successful people and communities. Acting on these key principles, the Borough's comments address inadequate government-to-government consultation, lack of local and traditional knowledge, and lack of geospatially explicit spill trajectory models as described below.

Lack of Government-to-Government Consultation

With the exception of the Native Village of Kotzebue, BOEMRE did not consult with the Borough's six coastal villages (Noatak, Kivalina, Deering, Buckland, Selawik, and Noorvik) that potentially will be directly impacted by the environmental impacts of a very large oil spill resulting from Oil and Gas Lease Sale 193 in the Chukchi Sea. Additionally, residents in these communities may benefit from economic activity resulting from offshore oil and gas development in the region.

In either case, community residents may be impacted by the proposed action. In accordance with Executive Order 13175 of November 6, 2000 (Consultation and Coordination with Indian Tribal Governments), and a related Presidential Memorandum issued on November 5, 2009, BOEMRE should have met with leadership in these villages to: 1) clearly describe the criteria for submitting substantive written comments and oral testimony during the public comment period, and 2) fully describe the scope of the Revised Draft SEIS such that residents could better understand and comment on proposed actions that might affect their lives.

Further justifying the need for government-to-government consultation, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling emphasized the potential impact that oil and gas development would have on the Arctic species and communities:

Oil and gas development has the potential, directly or indirectly, to affect hunting success or the habitats of species important to subsistence. (Of course, offshore oil development could play a positive economic role in the native communities; some Inupiat whaling

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captains also work in the oil industry, for instance.) An Arctic Regional Citizens Council could help assure the active participation of the people who know this region the best in planning and response.¹

Lack of Local Traditional Knowledge

In addition to inadequate government-to-government consultation, the revised draft SEIS does not include enough of an emphasis on local and traditional knowledge. In a recent report on information needs for energy development in the Chukchi and Beaufort seas, the U.S. Geological Survey addressed the importance of local and traditional knowledge and subsistence. Addressing the need for a synthesis of the existing Arctic literature to conduct cumulative impacts analysis and promote more coordination and comprehensive planning among decision makers, the report includes the following observations:

The indigenous, subsistence community is extremely knowledgeable about the environment, ecosystem, and changing conditions of the Arctic. Local traditional knowledge is a critical resource and should be incorporated into all of the above syntheses and databases described throughout this report.ⁱⁱ

The subsistence community and culture are an essential component of the Arctic and all of the issues studied in this report will have an impact on these people and their way of life. To predict with any degree of accuracy the future of Arctic subsistence, with or without energy exploration and development, will require greater understanding of the potential changes in local environments and ecologies because subsistence patterns are vulnerable to climate change and anthropogenic development (whether it be oil and gas development, shipping, tourism, or another). Additional information is needed to determine the potential hazard to native subsistence livelihoods from oil and gas exploration and development, since such development can impact all parts of the spectrum from the specific subsistence animals themselves through their food chain and ecosystem.ⁱⁱⁱ

Lack of Geospatially Explicit Spill Trajectory Models

The Borough appreciates inclusion of information about spill trajectories in the revised draft SEIS. This information, however, is incomplete, especially with regard to potential impacts within the Borough.

- Spill trajectory models do not provide information regarding how a very large oil spill would impact coastal villages in the Northwest Arctic Borough.

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- The need for geospatially explicit spill trajectory models is essential to evaluate potential cumulative environmental impacts of a very large oil spill on coastal villages in the Northwest Arctic Borough.
Without this information, decision makers can neither adequately evaluate the proposed action nor provide for comprehensive planning and coordination.

We urge you to address the issues raised in this letter in the final revised SEIS. Please contact Ukallaysaq Tom Okleasik, Planning Director, if you have any questions about this letter. Ukallaysaq can be reached at 907-442-2500 ext. 109 or via email at tokleasik@nwabor.org.

Thank you for your consideration of these comments.

Sincerely,

Siikauraq Martha Whiting
Mayor

cc: Ukallaysaq Tom Okleasik, Planning Director
Kill'aq John Chase, Community Planner & Coastal Area Specialist
Gordon Brower, Planning Director, North Slope Borough
Northwest Arctic Borough Assembly Members

1 National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling. Report to the President. Chapter 10: American Energy Policy and the Future of Offshore Drilling. January 2011. Pg. 303.

2 Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370. Pg. 220.

3 Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, U.S. Geological Survey Circular 1370. Pg. 220.

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Edward S. Itta, Mayor

July 11, 2011

Dr. James Kendall
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
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Submitted at http://www.regulations.gov

Re. Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Dr. Kendall,

The North Slope Borough (NSB) appreciates this additional opportunity to comment on the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Alaska Region's NEPA review for Lease Sale 193. This is the fourth iteration of comments submitted by NSB regarding the environmental impacts of Lease Sale 193; as our earlier comments have yet to be fully addressed, they are thus incorporated here.

NSB continues to hold the position that leasing and oil and gas industry operations should not be permitted in the Chukchi Sea. As we outlined again in our November 2010 comments, this position is based on our longstanding beliefs that the risk of a significant oil spill cannot be eliminated, that the capability does not exist to effectively respond to such a spill in our remote and challenging environment, and that too little is known out the ecosystem.

The following are additional comments on the new revised draft SEIS published in May 2011.

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I. Environmental Impacts of Natural Gas Development

The significance thresholds articulated in BOEMRE and MMS NEPA documents has been a recurring and ongoing concern for NSB. In this particular document, a number of problematic significance thresholds are set out on page 75.

- Page 75, IV.A.1. Significance Thresholds. Biological Resources: "A significant effect on biological resources is determined as follows: an adverse impact that results in a decline in abundance and/or change in distribution requiring three or more generations for the indicated population to recover to its former status." This broad generalization is an inappropriate threshold for many biological resources.
Page 75, IV.A.1. Significance Thresholds. Threatened and Endangered Species. "For declining populations, any take identified during the Section 7, ESA consultation process would constitute a significant impact." For some species currently listed or under consideration for listing, population levels and/or trends are unknown. Thus, there is no basis for determining whether this standard applies. This section should clarify how this threshold would apply for threatened or endangered species if the population numbers and/or trends are unknown.
Page 75, IV.A.1. Significance Thresholds. Subsistence-Harvest Patterns. "A significant effect on subsistence-harvest patterns occurs when one or more important subsistence resources becomes unavailable, undesirable for use, or available only in greatly reduced numbers for a period of 1-2 years." This significance threshold is enormously problematic. This threshold vastly understates the importance of subsistence activities and resources to our residents. Given the critical importance of subsistence hunting activities to our communities, any adverse effect on the hunt, the availability of any subsistence resources, or directly on the subsistence resource population is significant. The standard should not be limited to those subsistence resources the agency deems "important." Nor should the standard be tied only to the availability of the resources - a population may be available, but the hunt may be more difficult, time-intensive, or dangerous. The 1-2 year element of this standard particularly unacceptable. It is significant if even a portion of a subsistence hunt is prevented, and significant when a hunt becomes more difficult or dangerous.
Page 75, IV.A.1. Significance Thresholds. Sociocultural Systems. "A significant effect on sociocultural systems is defined by chronic disruption of sociocultural systems that occurs for a period of 2-5 years, with a tendency toward the displacement of existing social patterns." This significance threshold also needs to be revised.

The Deputy Regional Director for BOEMRE's Alaska Region indicated that these thresholds are currently being revised by the agency. We hope the agency follows through with this commitment and revises this document accordingly.

Page 12, Paragraph 1 (I.F.4. Best Available and Safest Technology Requirements): "To ensure that all oil and gas exploration, development, and production activities on the OCS are conducted

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in a safe and pollution-free manner, the OCS Lands Act requires that all OCS technologies and operations use the best available and safest technology that the Secretary determines to be economically feasible. These include requirements for state-of-the-art drilling technology, production-safety systems, well control, completion of oil and gas wells, Oil Spill Response Plans (OSRPs), pollution control equipment, and specification for platform/structure designs." We agree that BOEM should ensure OCS activities are conducted in a "safe and pollution-free manner." We encourage BOEM to work with other regulatory agencies to ensure that these aspirations are met. In past years, exploration plans, as well as air and water permits have all contemplated significant amounts of air, water, and noise pollution added to the Arctic environment. BOEMRE should consider pollution control technologies undertaken elsewhere in the Arctic.

Page 13, Section I.F.7. BOEMRE Inspection Program. The document should include more information regarding BOEMRE inspection program for operations in the Chukchi. We are eager to receive more information regarding the frequency and timing of inspections and facilities and equipment inspection.

Page 16, I.I.C. Mitigation Measures. This section simply refers back to the 2007 FEIS. We suggest a number of additional mitigation measures to be included:

- BOEMRE should work Alaska Native co-management committees to ensure impacts to marine mammals are avoided as well as to ensure the availability of marine mammals to subsistence users. MMPA requirements should be incorporated in BOEMRE's NEPA review.
BOEMRE should ensure the use of the "best available technology" in the OCS, including zero-discharge technology. Shell has agreed to this standard in Camden Bay; and the standard should be the same in Chukchi Sea.
To avoid impacts to the beluga hunt, vessels should not transit the Chukchi Sea until July 15th or the end of beluga hunt.
Mitigation measures should be adopted to ensure that walrus haul-outs do not stampede.
Mitigation measures should be adopted to avoid bird strikes.
As communities on the Chukchi coast have started to hunt in the fall due to poor spring ice conditions, there should be a shutdown to allow for the hunt to occur without disturbance.
BOEMRE should require that industry monitoring and environmental data be made available to the public to enable an open and honest conversation regarding the success of mitigation measures.

Page 21, I.I.D.1 Summary of Impacts: Alternative I - Proposed Action, Air Quality, Oil Exploration, Development, and Production. Any reduction of air quality from current levels, regardless of whether the NAAQS are exceeded, is a significant impact.

Page 21, I.I.D.1 Summary of Impacts: Alternative I - Proposed Action, Air Quality, VLOS. The qualifier "potentially" should be removed from the phrase "potentially harmful pollutants."

Page 71, Community Subsistence-Harvest Patterns, states: "Wainwright, Point Hope, and Point Lay whale only during the spring season." This statement is incorrect. Wainwright has had

successful fall bowhead whale hunts. (Personal communication with Billy Adams, NSB Subsistence Research Coordinator)

Page 97 and 106, "Studies of gray, bowhead, and humpback whales have shown that received levels of impulses in the 160-170 dB re 1 µPa range appear to cause avoidance behavior in a significant portion of the animals exposed." This statement is incorrect; avoidance responses occur at 120dB as recognized in previous MMS NEPA documents and IHA applications submitted to NMFS. See, Minerals Management Service, Alaska OCS Region, "Final Programmatic Environmental Assessment, Arctic Ocean Outer Continental Shelf Seismic Surveys" (2006) ("The 120-dB isopleth is the approximate zone where Richardson et al. (1999) found at 20 kilometers (km) almost total bowhead whale exclusion. Sound levels received by bowhead whales at 20 km ranged from 117-135 dB re 1 µPascal root-mean-square (dB re 1µPa rms) and 107-126 dB re 1µPa rms at 30 km, and it is the level recommended by the 2001 Open Water Meeting participants as where significant responses by bowhead whales in the Beaufort Sea occur.")

Pages 301-302, VI.C.1. ESA Section 7. This section does not explain the numbers of Threatened Steller's or Spectacled Eiders that industry can "take". An exact number should be given by species, and the procedures in effect should these birds be present should be clearly stated. What can they responders do if they find these birds when they begin work?

II. Missing Information Analysis

In our November 2010 comments on the draft SEIS, we highlighted the relevance of the upcoming USGS data gap analysis. Since the last comment period, USGS has released this analysis. This report underscores NSB's longstanding concerns regarding the lack of baseline science available to support intelligent planning for any offshore oil and gas development. BOEMRE should undertake a comprehensive review of this analysis and reconsider the requirements of 40 C.F.R. §1502.22 in light of this analysis. NSB fully supports any additional time necessary for BOEMRE to incorporate and address the findings of the USGS document.

The LS 193 Alternatives are based largely on a logical inference that activity occurring further from the coast will result in fewer impacts to coastal resources and residents. This approach ignores the reliance of residents upon migratory marine resources and the importance of other areas to those marine resources.

If OCS development occurs, it must occur in a manner that minimizes adverse impacts to residents and the ocean ecosystem upon which our residents rely. It is both NSB's hope and BOEMRE's mandate that human, marine, and coastal environments be protected. But without a comprehensive understanding of the relative importance of offshore areas it is impossible to plan intelligently to reduce impacts and achieve our mutual goal of protecting the environment.

III. Very Large Oil Spill Analysis

This revised draft SEIS sets out a first effort to examine the environmental impacts of a very large oil spill (VLOS) in the Chukchi Sea. This analysis is long overdue. NSB very much appreciates that BOEMRE has undertaken this analysis as we have long held that this type of impact analysis should be completed. We all hope that this hypothetical scenario never plays out in any form, but it is important to NSB and our residents that the decision maker acknowledge and the public is informed of the risks associated with exploratory oil and gas activity and the threat to our communities.

The VLOS analysis sets out a hypothetical scenario, meant to be "consistent with CEQ recommendations, [...] supplements existing NEPA analyses related to Lease Sale 193 by evaluating new information and analyzing potential environmental impacts of a VLOS, which is a low probability, high impact event." (Page 123) The scenario is described as commencing during the open water drilling season – between July 15 and October 31 (page 129); and assumes that "the discharge would be stopped within 74 days of the initial event." While intervention may take a variety of forms, the 74 days reflects the "longest of three estimated time periods for completing a relief well." There are a number of clarifications and improvements that should be made to the VLOS scenario.

A. 74-Day Duration

First, reconsideration or further explanation of the 74 day duration is needed. The narrative descriptions of the VLOS scenario suggest the agency intended to set out the worst case spill – "extreme case in ... discharge period ... that represents the largest discharge expected at any site." This scenario envisions a relief well being drilled between December 10th and January 13th (for a spill commencing on October 31st and a relief well drilled starting 40 days later). Yet this document also recognizes that "Sea ice generally begins forming in late September or early October, covering most of the sale area by mid-November or the beginning of December" (page 43). Given ice and weather conditions during this time of year in the Chukchi Sea, it seems improbable that the drilling rigs could operate to drill a relief well. Furthermore, the perpetual darkness of the Arctic winter may complicate drilling and ice management operations. If a well is not controlled before weather and ice conditions prevent the completion of a relief well, then the duration of the spill could continue through the winter until the next open water season. This would result in a greater volume of spilled oil.

Given the physical limitations associated with offshore activity after October 31st and the limited ability of vessels to operate in heavy ice and arctic winter conditions the scenario duration does not follow from the narrative description of the VLOS: "an extreme case in flow rate and discharge period that in turn represent the largest discharge expected at any site in the subject area." (Page 126) Just as the document endeavors to apply "real world constraints" (page 123) to the flow rate estimate, "real world constraints" should be applied to the scenario duration.

Alternatively, the document must acknowledge this limitation, namely the response limitations for a late season event. And, note that if a late season well control event could not be managed in a prompt manner, that the environmental impacts would be substantially greater. We would

caution however, that this approach may not comply with the CEQ's August 2010 guidance which this VLOS seeks to satisfy. The impossibility of responding to a late season well control event is just one of the unique challenges of any offshore activity in the Arctic. It is important that the decision maker understand that the *worst* case scenario for Arctic operations is greater than 74 days. The physical limitations of operations in the Arctic highlight the importance of requiring operators to identify the relief well rig dedicated to respond to their activities and the proximity of a relief well rig to any exploration wells as they are drilled.

B. Relief Well by Original Drilling Platform

The VLOS scenario also should be more realistic about the possibility of the original drilling platform and equipment to drill relief wells. The use of the original drilling platform in the event of "an explosion and subsequent fire" leading to a blowout and loss of well control is presented on equal terms with the possibility of bringing in a second drilling platform. Presentation of this response method on equal grounds, is unreasonable. The immediate use of a rig involved in a well blowout to drill a relief well is not consistent with industry safety standards nor federal pre-drill safety standards required by BOEMRE (30 CFR 250). Well control experts' (e.g. Boots and Coats, Wild Well Control, Safety Boss) standard procedures require the rig involved in a well blowout to be examined to assess the extent of damage sustained to the rig [e.g. by fire, erosion, hydrocarbon spills] before the rig should be used to safely drill a relief well. Illustratively, Shell's Beaufort and Chukchi Seas Regional Tactics Manual instructs personnel to immediately evacuate areas where hydrocarbon vapors exceed safe thresholds, shut-down ignition sources that could pose an explosion hazard, and to respond at a safe distance. (Site Access and Characterization, S-1.) Furthermore, we are not aware of any major blowouts in history where a drill ship involved in a blowout drilled its own relief well. In contrast, history shows that when BOPs fail, rig evacuations are triggered and the original rig is unable to drill the needed relief well. For example:

- In 2010, the BP Macondo GOM well blowout, 11 people were killed and all others were immediately evacuated. The Deepwater Horizon semi-submersible drill rig was consumed by fire and sunk within days.¹ The Deepwater Horizon rig was unable to move away and drill its own relief well.
- In 2009, the Australia Montara Platform well blowout resulted in immediate evacuation of all personnel on the West Atlas jack-up rig. The rig was eventually consumed in a fire.² The West Atlas rig was unable to move away and drill its own relief well.
- In 2004, the GSF Adriatic IV jack-up rig operating in the Mediterranean Sea, offshore Egypt had a gas blowout igniting and sinking the rig.³ The Adriatic IV rig was unable to move away and drill its own relief well.

¹ BP Macondo Well Blowout, Gulf of Mexico (GOM), New Releases April-May 2010.
² PTTEP Australasia (Ashmore Cartier) Pty Ltd. (PTTEP), Montara Platform Blowout, New Releases August – October 2009.
³ http://home.versatel.nl/the_sims/rig/adriatic4.htm.

- In 2001, the Ensco 51 jack-up rig in the Gulf of Mexico lost well control. Hydrocarbons returning via the muds system posed an explosion hazard and personnel were immediately evacuated. A fire broke out destroying the derrick and substructure.⁴ The Ensco 51 rig was unable to move away and drill its own relief well.
- In 1998, the ODECO Ocean Odyssey semi-submersible drill rig lost well control and got substantial gas in the mud return at the drilling rotary table.⁵ All personnel were immediately evacuated, except one person who died after being ordered to remain on the rig to carryout continued operations.⁶ The Ocean Odyssey rig was unable to move away and drill its own relief well.
- In 1985, the West Vanguard semi-submersible rig blowout, one person was killed and all others were immediately evacuated, the rigs deck structure and engine room was damaged in the blast leaving the rig listing 10 degrees.⁷ The West Vanguard rig was unable to move away and drill its own relief well.
- In 1981, the Petromar V Drillship drilling in South China Sea suffered an uncontrolled sub-sea blowout which eventually caused the drillship to capsize.⁸ The Petromar V Drillship was unable to move away and drill its own relief well.
- In 1980, the Sea Quest semi-submersible rig blowout, all personnel were immediately evacuated, and the well caught fire and the rig was extensively damaged.⁹ The Sea Quest rig was unable to move away and drill its own relief well.

If the original rig is able to drill a relief well, certainly this option should remain open. But it seems unlikely that this will be possible. At a minimum, the limitations associated with this response option should be noted so the utility of the response option is appropriately qualified.

C. Other Concerns Regarding the Scenario

Other elements are also unclear and require further explanation. For example, it is not clear where the 4 days allocated for "weather downtime" originated. The document states that it is an "estimate based upon previous operations in the area." What operations are considered? Do the weather limitations of the "previous operations" translate neatly into the exploratory drilling context? Do the limitations contemplate weather in the same timeframe, including the period between a late-season event (October) and 74 days later (January)? It seems improbable that if a late season well control event occurred that the weather downtime would be limited to 4 days. Furthermore, this estimate should include additional estimates of weather downtime for equipment that is not in the immediate Chukchi Sea VLOS well area; that is, there needs to be

⁴ MMS 2001-08 Investigation and http://home.versatel.nl/the_sims/rig/ensco51.htm.
⁵ http://home.versatel.nl/the_sims/rig/o-odyssey.htm.
⁶ FR.D. Ireland. Ocean Odyssey Fatal Accident Inquiry, Aberdeen Sheriff Court, 1991.
⁷ <http://www.oilrigdisasters.co.uk/>.
⁸ http://home.versatel.nl/the_sims/rig/petromar5.htm.
⁹ <http://www.oilrigdisasters.co.uk/>.

consideration for the downtime associated with moving equipment from Anchorage or Dutch Harbor to the Chukchi Sea VLOS well area. Additionally, the anticipated number of boats, workers, and airplanes that the scenario assumes will respond to a VLOS is unrealistic in winter conditions. Limits created by foreseeable physical conditions should be incorporated into the scenario.

The recurring theme of missing information is evident in the VLOS analysis. Little is known about surface circulation and current. More information is needed to evaluate where boom should be deployed and where response efforts should be prioritized. More information is needed regarding the efficacy of dispersants and their impacts to the environment.

D. Modeling

More information should be provided on the type of modeling performed by the (AVALON/MERLIN) software and the Oil Spill Risk analysis model (OSRA). The document should provide complete information on:

- 1) List of variables that are used in the model, including their source and range of values
- 2) Model assumptions
- 3) Number of model iterations run
- 4) Length of time used in the model input
- 5) The model structure (algorithms, model equations and rationale)
- 6) Model uncertainty and sources of error

The document should set out how many simulations were run. If only a small number of simulations were run, the numbers in these tables might include a non-ignorable component of Monte Carlo error. There would be two sources of uncertainty. First, the distributions of possible values for model parameters represent uncertainty about those parameters. Second, the sampled values drawn from those distributions to run through the model have a random component: even for the same distributions as in the previous sentence you would get different sampled values (and hence different model projections) if the simulation experiment were repeated. This second source of variance is not accounted for in these tables. Generally, when a source of variance is ignored, upper and lower bounds for quantities like percent contact will be too narrow. Conversely, if the percentages are calculated from a systematically chosen set of parameter values (e.g., combinations of "high", "medium", and "low" values for each parameter), then the percentages in the tables in Appendix B are meaningless because they are strongly affected by the particular design of the Monte Carlo experiment.

Page 133. "In addition, episodes of severe storms characterized by strong winds (25 to 30 miles per hour) and precipitation can dictate the movement of sea-surface oil drift and also direct oil toward the coastline following a VLOS occurring during summer or winter." These are far from severe storm events, much higher wind speeds have been recorded at Barrow.

Pages 134-136. Levels of Recovery and Cleanup Activities.

- "The levels of activities required to apply the techniques described above are dependent on the specific timing and location of a spill. As weather, ice, and logistical considerations allow, the number of vessels and responders would increase exponentially as a spill continues." Again, this is misleading since the contrary is not noted: "the number of vessels and responders would decrease exponentially as a spill continues and weather and ice become unfavorable.
- "Between 5 and 10 staging areas would be established." Please estimate the "downtime" required to establish 5 to 10 staging areas? Please identify their current locations on a map. Are supplies in place already? If so, for how many areas? Please describe what a staging area.
- "About 15 to 20 large skimming vessels (i.e. the Nanuq, Endeavor Barge, Tor Viking, other barges from Prudhoe Bay, USCG skimming vessels, vessels from Cook Inlet and Prince William Sound) could be used in offshore areas." Please show the "weather downtime" for getting "vessels from Cook Inlet and Prince William Sound" to the spill area.
- "Thousands of responders (from industry, the Federal government, private entities) could assist spill response and cleanup efforts as the spill progresses." Please explain how these thousands will get to the North Slope and where they will be housed. The simple answer that "workers could be housed offshore on vessels or in temporary camps at the 5-10 staging areas" does not answer in detail the logistics. Please specify the logistics. Also, please provide an estimate of "responder downtime."

Table B-1 states that it focuses on number of well control incidents with pollution per year in the Gulf of Mexico and Pacific OCS Regions and total OCS wells, but it does not include the volume for the Deepwater Horizon incident that occurred on 4/20/2010. To be as accurate as possible, this table must recalculate with Deepwater Horizon incident values.

Appendix B. Section 2.2. Ice Present.

- The second sentence in this section states: "The ice would restrict the oil somewhat and reduce spreading (Gjosteen and Loset, 2004; Faksness et al., in press)." Ice would also reduce ability to approach oil for physical clean-up. By not including this, the document directly notes only a potentially positive aspect of ice. This document would be improved by specifically noting both negative and positive aspects. As is, this omission creates a misleading, restricted impression. In the main document (page 135), these problems are stated but there are no supporting references. In addition, on page 135, the document states that "once [oil is] incorporated into the ice sheet further recovery operations would have to cease until the ice sheet becomes stable and safe enough to support equipment and personnel to excavate and/or trench through the ice to access the oil." Please specify the "ice downtime" for stable ice to form before clean-up could commence, as was done with the "weather downtime" estimate.
- Page 135 also states: "The other response option is embedding tracking devices in the ice and monitoring its location until the ice sheet begins to melt and the oil surfaces through brine channels at which time it could be collected or burned." Please provide a time estimate for this and specify methods as well as actual examples.
- Oil incorporated into ice (paragraph 3 in Appendix B) gives the impression that no matter what the condition, oil will either be contained by ice or incorporated by ice. There is no

mention of potential remodeling of under-ice surfaces in which oil could be released. Then it specifically states the following: "In first-year ice, most of the oil spilled . . ." How much is "most"? Where is/are references?

Appendix B, Section 3. Very Large Oil-Spill Weathering. "The weathering for very large spills followed the same methodology described in the Sale 193 FEIS (Appendix A, Section B.4), and the results for very large oil spills are described below. The oil weathering input parameters are as follows: The crude oil properties will be similar to a light crude oil of 35 API." Of course the properties "will be similar" since the weathering of a very large oil-spill is based on a light crude oil of 35 API to begin with. In reality, the choice of this oil is not fine for one type of oil, but this document could be improved by modeling at least three to four oil types and not just oil of 35 API. The Sale 193 Revised Draft SEIS, (page 131) states that "generally, oils can be divided into three groups of compounds: (1) light-weight, (2) medium-weight, and (3) heavy-weight components." Either all three should be modeled, unless there is a reason to expect only the light crude oil, in which case, this reason should be outlined.

Table B-4 describes the fate and behavior of a hypothetical 60,000-barrel crude oil spill in the Chukchi Sea. Under the footnote 2, it states "Meltout Spill (November 1-May 31). Spill is assumed to occur into first-year pack ice, pools 2-centimeter thick on ice surface." The document should explain why "Meltout Spill" was only considered until May 31, when in fact ice can be present into July. Second, the Ice Present section (2.2) states that "in first-year ice, most of the oil spilled at any one time would percolate up to the ice surface . . . [and] the pools on the ice surface would concentrate the oil, but only to about 2 millimeters thick (B5-B6); yet the table describes pools of oil to 2 centimeters thick on the ice surface. It is not clear whether the centimeter to millimeter change is a mistake or whether there is a subtle difference between the table and the text.

Appendix B. Section 4.1. Conditional Probabilities. "For purposes of analysis the oil could freeze into the ice and melt out in the Arctic spring or summer." This is too simplistic. Are these the only possibilities considered? What happens to oil and its movement during freeze/thaw cycles?

II. Public Hearings

We would like to acknowledge improvements in the public hearing process in this last round of public meetings. Last fall, when BOEMRE visited the Borough's coastal communities with the draft SEIS, the officials did not provide copies of the documents, did not present maps to explain the planning area, and overall, the presentation was difficult to follow. In the most recent iteration of public meetings the agency arrived prepared with both CD and paper copies of the document, maps illustrating the area at issue, took the time to verbally explain the history of the EIS and supplemented brief presentation with flip charts for a visual component. Agency staff listened attentively to residents' comments and concerns and approached exchanges with residents with a receptive demeanor. BOEMRE's community liaison was attentive to advertising the availability of the document and the public hearings. And, the agency displayed the necessary flexibility in rescheduling meetings to accommodate the affected communities. These were

improvements in the public meetings, and we hope that the improvement in process also foretells an agency more attentive to the concerns of our residents.

Thank you for considering these comments.

Sincerely,



Edward S. Itta, Mayor

City of Saxman

PUBLIC SUBMISSION

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Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0123

Comment from Jason Custer, City of Saxman

Submitter Information**Name:** Jason Custer**Address:**

PO Box 7892

Ketchikan, AK, 99901

Email: jasonryancuster@gmail.com**Organization:** City of Saxman**Government Agency Type:** Local**General Comment**

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska's Outer Continental Shelf would have a tremendous ripple effect throughout the nation's economy – creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska's OCS are significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs

City of Saxman

nationwide with a cumulative payroll of \$154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 15,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans.

Environmental Organizations

ALASKA WILDERNESS LEAGUE – CENTER FOR BIOLOGICAL DIVERSITY
 DEFENDERS OF WILDLIFE – EARTHJUSTICE
 NATIONAL AUDUBON SOCIETY – NATURAL RESOURCES DEFENSE COUNCIL
 NORTHERN ALASKA ENVIRONMENTAL CENTER – OCEAN CONSERVANCY
 OCEANA – PACIFIC ENVIRONMENT – REDOIL – SIERRA CLUB
 THE WILDERNESS SOCIETY – WORLD WILDLIFE FUND

July 11, 2011

VIA FEDERAL RULEMAKING PORTAL

Dr. James Kendall
 Regional Director
 BOEMRE Alaska OCS Region
 3801 Centerpoint Dr.
 Anchorage AK 99503-5820

Re: Chukchi Sea Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement, OCS EIS/EA BOEMRE 2010-034 (May 2011)

Dear Regional Director Kendall:

The undersigned groups hereby submit the following comments on the revised draft supplemental environmental impact statement for Chukchi Sea Lease Sale 193 (Revised Draft Supplement) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act (NEPA).

The Revised Draft Supplement proposes to move forward with leasing decisions in the absence of critical scientific information. The document appears designed to justify BOEMRE's earlier decision to hold Lease Sale 193 rather than provide a meaningful reanalysis to inform reconsideration of the decision. This approach is inconsistent with BOEMRE's obligations under the law.

The Revised Draft Supplement does not revise the flawed analyses of missing information or the effects of natural gas development contained in the first draft supplemental environmental impact statement (Original Draft Supplement) in October. On November 30, 2010, the undersigned groups submitted comments to the Original Draft Supplement, and we renew those comments and incorporate them by reference here. We supplement our prior comments where necessary and provide additional comments on BOEMRE's new analysis of a very large oil spill in the Chukchi Sea, which in this document the agency for the first time admits is possible.

Since BOEMRE published the Revised Draft Supplement, the Secretary of Interior has released a major and critically relevant report from the U.S. Geological Survey (USGS): *An*

*evaluation of the science needs to inform decisions on outer continental shelf energy development in the Chukchi and Beaufort Seas, Alaska.*¹ The report confirms that critical questions, particularly about which areas of the Chukchi Sea are important to the species that inhabit the region and how and when they use those areas, remain unanswered because of a lack of scientific data. As explained further below, the USGS report demonstrates the inadequacy of BOEMRE's current approach to analyzing missing information and the indefensibility of the agency's conclusion that no information essential to the lease sale decision is missing. The report compels a fundamental reconsideration of BOEMRE's approach and offers ample justification for BOEMRE to extend the remand period to address missing information.

At the lease sale stage, BOEMRE makes important decisions about whether to offer areas of the ocean for oil and gas activities, and if so, under what conditions. These decisions are concrete and consequential—once leases are validly issued, the government's discretion is more constrained. Without gathering the missing information identified in the Lease Sale 193 environmental impact statement (EIS), USGS report, and elsewhere, BOEMRE cannot satisfy its stewardship obligations under the law, and it cannot make good decisions about whether and how to proceed with activities in the Arctic Ocean like Lease Sale 193.

BOEMRE should recognize that there is missing information about the Chukchi Sea that is essential to the lease sale decision. BOEMRE should rescind the Revised Draft Supplement, obtain missing information that is essential, and prepare a new EIS that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193. Short of extending the remand period, the agency should explore alternatives that allow it to maintain the status quo on Lease Sale 193 leases while it obtains essential missing information, for example, by deciding to continue the suspension of leases pending further research and analysis to inform future decisions about whether, where, and how to implement the leases.

I. Missing Information Analysis

The Original Draft Supplement presented an analysis pursuant to 40 C.F.R. § 1502.22 that concluded that BOEMRE had all information essential to the decision about whether to offer oil and gas leases in the Chukchi Sea. The Revised Draft Supplement does not meaningfully revise the Section 1502.22 analysis and reaches the same conclusion. The agency does not rescind or amend the hundreds of admissions that it cannot yet answer fundamental questions about the basic ecology of the Chukchi Sea and the potential effects of oil and gas activities there. For example, the agency admits that it still "lack[s] site-specific data on the habitat-use patterns, routes, and timing to assess impacts" on birds, which "have a high probability of experiencing substantial negative impacts" from oil and gas activities.² It is still "unable to determine at this time if significant impacts will or will not occur" to marine mammals or "if noise introduced into the environment from industrial activities, including drilling and seismic

¹ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370 (USGS Report), available at <http://pubs.usgs.gov/circ/1370/>.

² Bureau of Ocean Energy Management, Regulation and Enforcement, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Revised Draft Supplemental Environmental Impact Statement (EIS), OCS EIS/EA BOEMRE 2010-034 at A7 (May 2011) (Revised Draft Supplement).

operations, will have an adverse impact on non-endangered and non-threatened marine mammals."³ But nevertheless, BOEMRE concludes that it does not need to answer these or myriad other questions before making leasing decisions in the Chukchi Sea. The conclusion was untenable in October, and it is even more so now in light of the USGS report and other evidence described below.

A. The USGS Report Compels Reconsideration of BOEMRE's Approach

The newly published USGS report demonstrates the fallacy of BOEMRE's approach. The report is a culmination of a year-long study by the USGS designed specifically to analyze data gaps and research needs for the Arctic Ocean in connection with oil and gas activities in the region.⁴ The report concludes that there are large information gaps about the Arctic Ocean. Many of these gaps are directly related to understanding the importance of different areas of the Ocean to different species and to the ecosystem as a whole. "The Arctic environment is highly variable both physically and biologically," but scientific understanding of those differences is not well developed, which serves as a "major constraint to a defensible science framework for critical Arctic decision making."⁵ The USGS report confirms that essential missing information about the Chukchi Sea is missing and offers ample justification for BOEMRE to extend the remand period to address this information.

A fundamental element of a lease sale decision is spatial: BOEMRE must decide which areas to open to oil and gas leasing. As BOEMRE itself has acknowledged, data about the importance of different areas in the region under consideration—for example when and how various species use particular areas and how important that use is to the health of the population and broader ecosystem—is critical to this decision.⁶ The USGS report makes clear that this type of spatial and temporal information is missing for the overwhelming number of species in the Arctic Ocean and the Chukchi Sea:

- For marine mammals generally, "seasonal, annual, and geographic variability in diet are poorly quantified and foraging areas are poorly described."⁷

³ *Id.* at A7, A8.

⁴ In May 2010, Secretary Salazar cancelled the remaining Arctic Ocean leases in the 2007-2012 Five Year OCS Leasing Program, stating "that the country must take a cautious approach in the Arctic, and gather additional scientific information about resources, risks, and environmental sensitivities before making decisions about potential future lease sales in frontier areas." Department of the Interior, Fact Sheet, A Comprehensive, Science-Based Offshore Energy Plan at 1 (May 27, 2010). He directed the USGS to conduct an evaluation of scientific needs in the region "[t]o better understand the resilience of Arctic coastal and marine ecosystems to potential OCS resource extraction activities . . ." *Id.*

⁵ USGS Report at 151.

⁶ See Alaska Wilderness League, et al., Comments on Draft Chukchi Sea Lease Sale 193 Supplemental EIS at 9-10 (November 30, 2010) (November 30 Comments) (citing EIS).

⁷ See, e.g., USGS Report at 59 ("Trophic interactions of marine mammals were first studied 30 years ago. Although trophic structure generally is understood for most species (for example, general prey types, where they feed in the food web), seasonal, annual, and geographic variability in diet are poorly quantified and foraging areas are poorly described."); see also *id.* ("Population enumeration is poor, even non-existent, for many [marine mammal] species, and relatively good for a few. Without information on stock structure, however, which is poorly known for many species but fundamental to management, data are difficult to interpret even for species where abundance estimates exist.").

- For bowhead whales, "the understanding of essential spatial and temporal habitat needs . . . particularly the oceanographic parameters that most influence foraging, breeding, raising young, and migrating is not yet sufficient to confidently determine the times and places where whales might be most impacted by anthropogenic sounds."⁸
- For beluga whales, the "present understanding of the essential spatial and temporal habitat needs . . . in the Arctic is limited and constrains the ability to confidently understand and efficiently mitigate potential anthropogenic noise impacts."⁹
- For gray whales, "present understanding of the essential spatial and temporal habitat needs . . . in the Arctic is limited and constrains the ability to presently confidently understand and efficiently mitigate potential anthropogenic noise impacts."¹⁰
- For seals, "[t]here is a basic lack of information about ice seals. Key information about the abundance, distribution, and vital aspects of ice seals is incomplete."¹¹
- For walrus, "[b]etter understanding and inventory of essential spatial and temporal habitat needs . . . during its summering in the Chukchi Sea, particularly the oceanographic parameters that determine foraging, are needed."¹²
- For fish, "[i]nformation about status and trends, habitat requirements, relative distribution and abundance, and knowledge of life history stages of marine fish is incomplete and unavailable for large expanses of Arctic nearshore and shelf waters."¹³
- For birds, "[s]tudies to examine seasonal dynamics of seabirds in the Chukchi Sea related to oceanography, climate, sea-ice dynamics, primary and secondary productivity and movements of birds from breeding colonies (for example, Cape Lisburne) . . ." and "[f]urther analyses and studies . . . to increase the understanding of seasonal and inter-annual variation in shorebird use (numbers of birds, timing of their use, change in site quality) of key post-breeding areas, especially coastal areas where oil development is likely to occur (for example, the deltas of the Meade, Ikpikpak, Colville, Sagavanirktok, and Canning Rivers, and coastal sites on NPR-A)" are necessary.¹⁴
- The list goes on.¹⁵

The USGS report's conclusions and recommendations underscore that the type of information that is missing is precisely the type of information that is critical at the lease sale stage: namely, what areas of the Chukchi Sea are ecologically important. The lack of such information constrains agencies' abilities to assess the potential impacts of industrial activity in the Chukchi Sea, let alone rationally plan and manage those activities. BOEMRE cannot credibly assert that information that does exist is sufficient to "support sound scientific judgments and reasoned managerial decisions"¹⁶ about where to allow oil and gas activities when it does not know what areas of the sea are biologically significant. It cannot credibly defer

⁸ *Id.* at 182.

⁹ *Id.* at 184.

¹⁰ *Id.* at 185.

¹¹ *Id.* at 187.

¹² *Id.* at 190.

¹³ *Id.* at 69.

¹⁴ *Id.* at 66 (noting that some industry studies are already underway but have not yet been published).

¹⁵ See, e.g., USGS Report at 43 ("Circulation processes along the Chukchi Sea shelfbreak and around Hanna Shoal in the northeast Chukchi Sea are poorly understood."); *id.* at 47 ("Improved understanding of the impact of the changing ice regime on species and on biological hot spots in the Chukchi Sea . . ." is needed).

¹⁶ Revised Draft Supplement at A3.

information gathering to later stages, because the information that is missing is critical to the lease sale decision—the decision about where—and the lease sale decision constrains later decisions, particularly in terms of spatial choices. By underscoring the spatial nature of missing information about the Chukchi Sea, the USGS report highlights the arbitrariness of BOEMRE’s out-of-hand rejection of the importance of all missing information to the lease sale decision. It compels a full reconsideration of BOEMRE’s approach to missing information in the Chukchi Sea.¹⁷

B. BOEMRE Should Heed The Recommendations Of The National Commission On The BP Deepwater Horizon Oil Spill And Offshore Drilling And Of The Presidential National Ocean Policy Task Force

In January 2011, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling (Commission) released its final report and recommendations. The Commission specifically concluded there are “serious concerns” and “special considerations” regarding Arctic drilling and oil spill response. The Commission called for a “comprehensive overhaul of both leasing and the regulatory policies and institutions used to oversee offshore activities.”¹⁸ It concluded “that the breakdown of the environmental review process for OCS activities [at the former Minerals Management Service] was systemic and that Interior’s approach to the application of NEPA requirements in the offshore oil and gas context needs significant revision.”¹⁹

The Commission Report underscores the need for BOEMRE to gather missing data to inform its Arctic Ocean management decisions. The report reiterated concerns identified by scientists, communities, and courts about gaps in scientific information in the Arctic Ocean and BOEMRE’s ability to make informed management decisions in the Arctic: “Scientific understanding of environmental conditions. . . in areas proposed for more drilling, such as the Arctic, is inadequate. The same is true of the human and natural impacts of oil spills.”²⁰ In light of these concerns, the Commission recommended “an immediate, comprehensive federal research effort to provide a foundation of scientific information on the Arctic (with periodic review by the National Academy of Sciences), and annual stock assessments for marine mammals, fish, and birds that use the Beaufort and Chukchi Seas.”²¹ Recognizing that these basic science gaps are important for BOEMRE’s management decisions, the Commission recommended that missing scientific information should be gathered through research “with

¹⁷ The USGS report, and the studies and documents underlying the report, should all be included in the administrative record for the remand decision.
¹⁸ National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling Report to the President at 250 (January 2011) (Commission Report), available at <http://www.oilspillcommission.gov/final-report>.
¹⁹ *Id.* at 260.
²⁰ *Id.* at vii; see also *id.* at 301 (“Environmental and biological conditions are at least as well understood along the Atlantic coast as in the Gulf—and there are also important facilities, such as Coast Guard installations in place; in contrast, equivalently detailed geological and environmental information does not exist for the Arctic exploration areas of greatest interest for energy exploration—and industry and support infrastructures are least developed, or absent, there.”).
²¹ *Id.* at 303.

specific timeframes in mind in order to inform the decision-making process.”²² The Commission recommended that “[i]n less well-explored areas, Interior should reduce the size of lease sales so their geographic scope allows for a meaningful analysis of potential environmental impacts and identification of areas of ecological significance.”²³ In frontier areas like the Arctic, the Commission also called for collection of “data on prevailing environmental conditions on a broad geographic scale, not just at individual lease sites.”²⁴ It stated that “[e]xpanded coordination and cooperation on scientific research efforts with [the National Oceanic and Atmospheric Administration (NOAA)], the U.S. Geological Survey, and other agencies with relevant expertise can improve the quality of science available for OCS decision-making.”²⁵

The advice of the Commission—to identify key research needed to inform specific decisions and carry it out on a defined timeline to influence those decisions—is also strongly supported by President Obama’s National Ocean Policy. In July 2010, the Presidential National Ocean Policy Task Force stated in its final report that the one of the priority needs for addressing environmental stewardship of the rapidly changing Arctic Ocean is “[i]mprovement of the scientific understanding of the Arctic system and how it is changing in response to climate-induced and other changes.”²⁶

During its consideration of the Lease Sale 193 remand, BOEMRE should heed the Commission’s and Task Force’s recommendations. BOEMRE’s current approach falls far short of the approach recommended by the President’s Commission and Ocean Policy Task Force.²⁷ Although BOEMRE cannot fill in all the gaps in scientific understanding immediately, the agency must identify the critical information and develop an approach for gathering and synthesizing that information before it proceeds with a leasing decision.

C. BOEMRE Should Collaborate With Other Expert Agencies

As discussed above, the Commission recommended that BOEMRE engage in a “more robust and formal interagency consultation process” to “identify precise areas that should be excluded from lease sales because of their high ecological importance or sensitivity.”²⁸ BOEMRE should follow this advice and coordinate with NOAA and USGS, among others, in preparing its analysis of missing information, natural gas development, and the effects of a very large oil spill.

²² *Id.* The Commission’s recommendation does not require a “*de facto* moratorium” on all activity in the Arctic until definitive information is gathered to fill all existing and acknowledged gaps, *id.*, but rather that information necessary to inform specific key decisions be identified and gathered before those decisions are made. This recommendation for targeted research mirrors Section 1502.22’s mandate that agency’s obtain information essential to decisions before making them.
²³ *Id.* at 262.
²⁴ *Id.* at 263.
²⁵ *Id.*; see also *id.* at 262 (stating that a “more robust and formal interagency consultation process is needed—with the goal of identifying precise areas that should be excluded from lease sales because of their high ecological importance or sensitivity”).
²⁶ Final Recommendations of the Interagency Ocean Policy Task Force, at 40 (July 19, 2010), available at http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.
²⁷ The Spill Commission Report, National Ocean Policy Task Force documents, and the studies underlying these reports should all be included in the administrative record for the remand decision.
²⁸ Commission Report at 262.

BOEMRE recently entered into a “Memorandum of Understanding” with NOAA.²⁹ Recognizing the distinct areas of expertise of each agency and their joint management responsibilities of the ocean, the memorandum was intended to foster greater cooperation and collaboration among the agencies.³⁰ Unfortunately, BOEMRE and NOAA here appear to be moving in the opposite direction. The Original Draft Supplement listed NOAA as a cooperating agency, but the Revised Draft does not. NOAA’s role here is unclear, but whether NOAA is a formal cooperating agency or not, BOEMRE should coordinate closely with NOAA in conducting its remand analysis. The agency has considerable expertise on marine mammals and fish that should inform BOEMRE’s work. On February 28, 2011, NOAA submitted detailed comments to the Original Draft Supplement. Among other things, the comments stated that information about how seismic surveying will affect fish is essential to the lease sale decision and must be obtained. The agency explained this comment by pointing to contradictory statements in the Original Draft Supplement. On the one hand, BOEMRE says it does not have information to determine whether seismic surveying would have population-level effects on fish because experiments to date have been inadequate. On the other hand, BOEMRE asserts that available scientific information is sufficient to conclude that there will be no significant effects to fish. BOEMRE appears to have ignored NOAA’s comment—the Revised Draft Supplement continues to assert that BOEMRE need not obtain the missing information.³¹

NOAA’s comments about missing information for fish are equally applicable to missing information about marine mammals. On the one hand, BOEMRE states in the Revised Draft Supplement that it does not have sufficient information to determine effects on marine mammals of oil and gas activities.³² On the other hand, it states “sufficient information is available to support sound scientific judgments and reasoned managerial decisions at the lease sale stage.”³³ In its 2007 comments to the original Lease Sale 193 draft EIS, NOAA said “[d]ata to describe marine mammals within the sale area and their habitat use of the sale area are lacking or inadequate to support impact assessment and mitigation planning” and “acquisition of [audiometric data] must precede leasing, where acoustic effects on marine mammal species have not been adequately researched.”³⁴ BOEMRE is still unable to answer these and other basic questions about noise effects on marine mammals. That information, like noise effects on fish, is essential to the lease sale decision. The recent USGS report further underscores the extent and importance of missing information about marine mammals essential to the spatial decision at the

²⁹ Memorandum of Understanding on Coordination and Collaboration Regarding Outer Continental Shelf Energy Development and Environmental Stewardship between the U.S. Department of the Interior and U.S. Department of Commerce (May 19, 2011).
³⁰ BOEMRE, Press Release, BOEMRE and NOAA to Increase Coordination, Collaboration on Offshore Energy Development and Environmental Stewardship (May 23, 2011), available at <http://www.boemre.gov/oc/pres/2011/pres0523b.htm>.
³¹ Revised Draft Supplement at A5.
³² See, e.g., Revised Draft Supplement at A7, A69.
³³ *Id.*
³⁴ *Native Village of Point Hope v. Salazar*, 1:08-cv-00004-RRB, Administrative Record, MMS AR 1304 (Letter from Robert D. Mecom, National Oceanic and Atmospheric Administration, to John Goll, Minerals Management Service, Re: Minerals Management Service (MMS) Draft Environmental Impact Statement (DEIS) for Chukchi Sea Planning Area – Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (Lease Sale 193) (Jan. 30, 2007)) at 3.

lease sale stage. BOEMRE should obtain this information before making decisions about Lease Sale 193.

D. BOEMRE Cannot Dismiss The Potential For Significant Effects From Noise and Disturbance From Oil And Gas Activity

BOEMRE asserts in places that noise is not relevant to potentially significant effects because “significant adverse effects to marine mammals could only occur as a result of the unlikely event of a large oil spill.”³⁵ To the extent BOEMRE now claims that noise cannot cause significant effects, that conclusion contradicts the agency’s prior conclusions, which it has not retracted or amended. For instance, BOEMRE acknowledged in the Final EIS, “[i]f seismic surveys were unmitigated, or are insufficiently mitigated to reduce impacts to the whales themselves, effects that are biologically significant could result if seismic surveys cause avoidance of feeding areas, resting (including nursing) areas, or calving areas by large numbers of females with calves or females over a period of many weeks.”³⁶ In addition, further evidence suggests that routine activities on leases, including drilling, can cause serious harm to marine mammals like bowhead whales. For example, an expert analysis of a drilling plan proposed for Lease Sale 193 leases in 2010 concluded that the activities created a “serious risk of harm to bowheads due to consequences of disturbance, direct injury due to exposure to dangerous levels of noise, and ship strike.”³⁷

To the extent BOEMRE discounts the effects of noise and disturbance because of future mitigation measures that could be imposed by other agency permitting processes under the Marine Mammal Protection Act (MMPA)³⁸, that approach is flawed. As described in our November 30 comments, BOEMRE may not avoid analyzing the impacts of an activity in an environmental impact statement by relying on future mitigation measures.³⁹ To the extent BOEMRE chooses to incorporate mitigation measures into its analysis of potential effects, it must analyze the efficacy of the measures.⁴⁰ There is evidence that the mitigation measures are not always effective. For example, an expert analysis of mitigation measures imposed under the MMPA for seismic surveying on and around Chukchi Sea Lease Sale 193 leases in 2009 concluded that the measures may not adequately protect bowhead whales and other marine mammals from serious adverse effects.⁴¹ More recently still, an expert panel evaluating seismic surveying in 2010, including on Chukchi Sea leases, highlighted the importance of evaluating cumulative effects of noise and the potential need to mitigate cumulative effects.⁴² BOEMRE

³⁵ See, e.g., Revised Draft Supplement at A8.
³⁶ Minerals Management Service, Chukchi Sea Planning Area Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, OCS EIS/EA MMS 2007-026 at IV-123 (May 2007) (Final EIS).
³⁷ Exhibit 1 at 15.
³⁸ Revised Draft Supplement at A3, A7-8.
³⁹ November 30 Comments at 14; *S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep’t of Interior*, 588 F.3d 718, 726 (9th Cir. 2009).
⁴⁰ November 30 Comments at 14.
⁴¹ Exhibit 2 at 14-16.
⁴² See Exhibit 3 at 5 (“There is growing evidence that under chronic noise conditions the impacts of acoustic masking could have biological consequences.”); *id.* at 7 (“noting the need ‘for a more robust and comprehensive means of assessing the collective or cumulative impact of many of the varied human activities that contribute noise into the Arctic environment’”). See also Exhibit 4 (“Long term or repeated disturbances and interactions may

cannot reasonably discount the relevance of missing information about the effects of noise on marine mammals in reliance on uncertain mitigation measures of questionable efficacy.

The USGS report also underscores that large gaps exist in information relating to the effects of noise on marine mammals. “[L]arge uncertainty still exists in extrapolating how impacts of noise on individual animals may affect survivorship or reproductive rates of population,” and “[m]ore work is needed that is designed to determine how to most effectively determine the impacts of noise at both individual and population levels.”⁴³ BOEMRE cannot credibly discount the potential for significant effects to marine mammals from oil and gas activity noise in the absence of this and other missing information acknowledged in the final 2007 EIS and the USGS report.

E. Additional Comments

The Revised Draft Supplement states in various places that the probability of an oil spill occurring, and its consequences, are the same for all alternatives, so missing information is not essential to a reasoned choice among alternatives.⁴⁴ These statements contradict assertions in the final 2007 EIS that the likelihood of a large oil spill will differ among lease sale alternatives.⁴⁵ BOEMRE should clarify its analysis. Furthermore, as discussed in our November 30 comments, it is not correct to state that BOEMRE has concluded that the effects of an oil spill will be the same under all alternatives. The final 2007 EIS asserts that there are differences in oil spill effects under alternatives.⁴⁶ The problem is that BOEMRE could only describe these differences in the most general terms given the lack of data. To the extent each of the alternatives do in fact result in the same or similar effects, BOEMRE may not have chosen an adequate range of alternatives for the lease sale analysis, and it should revisit the range here.⁴⁷

The Revised Draft Supplement contains an analysis of a very large oil spill that concludes that such a spill could have significant effects. The discussion does not acknowledge that there is incomplete or unavailable information relevant to the analysis, as required by 40 C.F.R. § 1502.22 (“When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear such information is lacking”).⁴⁸ BOEMRE cannot reasonably conclude that no information relevant to the analyses of a very large oil spill is unavailable or incomplete—the information it freely admits is missing in its analysis of smaller oil spills is clearly also relevant to its analysis of a very large oil spill. BOEMRE should acknowledge and analyze the information missing for the very large oil spill

displace marine mammals from preferred forage areas and migratory routes with potential consequences to animal fitness and reproduction.”).

⁴³ USGS report at 167.

⁴⁴ See, e.g., Revised Draft Supplement at A5 (“the probability of a large oil spill occurring is identical under each action alternative”); *id.* at A7 (“the effects, as well as the probability of these effects occurring, would be the same under each action alternative”).

⁴⁵ See Final EIS at IV-20-21.

⁴⁶ See, e.g., *id.* at IV-268-269.

⁴⁷ See November 30 Comments at 15.

⁴⁸ See Revised Draft Supplement at A4 (stating “the SEIS is written in compliance with the requirements of 40 CFR 1502.22 . . . the SEIS does not include unexplained statements regarding incomplete information”).

pursuant to 40 C.F.R. § 1502.22. Except for a discussion about effects to archaeological resources, BOEMRE’s analysis of natural gas development similarly omits any acknowledgement or discussion of missing information.⁴⁹ As discussed above and in our November 30 comments, noise and disturbance from drilling and associated ship and aircraft traffic threatens serious biological harm to marine mammals. BOEMRE cannot dismiss those effects in reliance on future permitting processes. In its natural gas development analysis, the agency must acknowledge missing and incomplete information and analyze it pursuant to 40 C.F.R. § 1502.22.

II. Very Large Oil Spill Analysis

The Revised Draft Supplement’s very large oil spill analysis (VLOS) is a step in the right direction. BOEMRE is right to acknowledge, in the wake of the *Deepwater Horizon* spill, that a spill of more than two million barrels in the Chukchi Sea is a foreseeable risk that should be addressed and planned for. And BOEMRE is correct to recognize that such a large spill would be released over a period of many days.⁵⁰ However, the Revised Draft Supplement’s analysis suffers from a number of flaws which render it inadequate to fully inform the lease sale decision. The analysis fails to help decision makers or the public understand the real-world consequences of a very large oil spill and fails to draw conclusions relevant to a central element of the lease sale decision—where to allow oil and gas activities.

First, the analysis relies excessively on recapitulation of the raw results of the oil spill trajectory model, without explaining what the results mean in terms of effects in the real world. Appendix B states that, unlike previous oil spill analyses that BOEMRE has conducted, such as in the final Lease Sale 193 EIS and the 2003 Beaufort Multi-sale EIS, these results do not represent “the percent chance of a large spill contacting a . . . resource;” rather, the results “represent the percent of trajectories from a long duration VLOS contacting these resources.”⁵¹ BOEMRE repeats this terminology throughout the document.⁵² This recitation of model results, however, does not inform the public or decision-maker about the effects of an oil spill—a “trajectory” is a creation of the model rather than a real-world phenomenon. BOEMRE should clarify what, exactly, the recitation of “percent[s] of trajectories” tells decision makers and the public about the actual behavior of very large oil spills. Also, by reciting model results for each environmental resource in isolation, BOEMRE fails to draw conclusions about the risk to the environment overall posed by a spill at any of the areas under consideration. BOEMRE should synthesize the oil spill information in a manner that presents the public and decision maker with information critically relevant to the lease sale decision—namely, how severe are the consequences of oil spills originating in different areas of the Chukchi Sea. The lease sale is fundamentally a decision about where to allow oil and gas activity, so analysis of the

⁴⁹ See *id.*

⁵⁰ Revised Draft Supplement at B8.

⁵¹ *Id.* Indeed, it is unclear how BOEMRE’s description of the trajectory model data in the VLOS analysis squares with the description of that same data in the 2007 Final EIS’s analysis of smaller “large” oil spills. BOEMRE has not revised or rescinded that earlier oil spill analysis, but it is in tension with the new analysis. BOEMRE must explain how the two presentations fit together.

⁵² See, e.g., Revised Draft Supplement at 141 (explaining that the model is used to “simulate estimated oil spill trajectories . . .”).

consequences of an oil spill originating in different parts of the region under consideration is critical to the decision about where to lease.

Second, the Revised Draft Supplement’s discussion of shoreline oiling is inadequate. Because the lease sale decision is fundamentally spatial, a meaningful oil spill analysis must tell the decision-maker and the public what are the different consequences of oil spills originating in different places. The Revised Draft Supplement does not provide such information for shoreline oiling. Rather, it provides only a composite of how much shoreline might be “discontinuously oiled” from an oil spill originating anywhere in the region under consideration.⁵³ While the Revised Draft Supplement may impart information about the extent of shoreline oiling for oil spills of different durations, it does not provide the information about impacts from oil spills originating in different areas, and potentially contacting different areas, species, and resources as a result, that is essential to the lease sale decision.

Third, the Revised Draft Supplement’s description of the size and shape of the oil slick from a VLOS is similarly flawed. The slick’s total area is estimated by adding up all of the area through which linear trajectories from the trajectory model pass.⁵⁴ BOEMRE does not, however, disclose whether or how slicks will behave differently if they originate from different areas and how that may differentially affect resources and species. Again, this spatial information is critical to the lease sale decision at issue here. BOEMRE also fails to integrate its conclusions about oil spreading into its impacts analysis, even after acknowledging that a VLOS will spread to cover a vast area. Instead, the impacts analysis is premised on the trajectory model, which assumes that oil spills do not spread, cannot contact multiple locations at once, and stop moving after landfall.⁵⁵ BOEMRE cannot adequately assess the risk posed by an oil spill without accounting for the actual behavior of oil spills, including spreading, in its impacts analysis.

BOEMRE should improve its VLOS analysis to explain how the trajectory model data on which it relies relates to real-world effects and should analyze and describe whether and how spills from different locations will behave differently and have different effects on the Chukchi Sea environment.⁵⁶

III. Greenhouse Gas Analysis

BOEMRE should analyze the contribution to climate change from burning the one billion barrels of oil and 2.25 trillion cubic feet of natural gas forecast to be produced as a consequence of Lease Sale 193. The 2007 Final EIS concluded that the contribution of burning oil produced from Lease Sale 193 would be “minor.”⁵⁷ It did not model the impact of an increase in oil supplies on total oil consumption, because it assumed that levels of oil consumption would not

⁵³ *Id.* at 133 (Table 5).

⁵⁴ *Id.* at B10.

⁵⁵ Final EIS at A.1-11-A.1-12.

⁵⁶ BOEMRE should also consider in its analysis a recent report by the Coast Guard, BP *Deepwater Horizon* Oil Spill Incident Specific Preparedness Review (Jan. 2011), available at <http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf>, when assessing the effects of and responses to a VLOS. That report and the documents underlying the report should become part of the administrative record for the remand decision about Lease Sale 193.

⁵⁷ Final EIS at V-16.

change.⁵⁸ The Revised Draft Supplement, however, offers a range of new and different rationales for declining to analyze these impacts, including that there are no reliable methodologies for estimating the impact of changes in oil and gas supplies on consumption patterns, that the productive capacity of the Chukchi is unknown, and that burning of oil and gas is not a reasonably foreseeable or proximate consequence of Lease Sale 193.⁵⁹ None of BOEMRE’s newly asserted rationales are supportable.

BOEMRE’s assertion that no reliable methodologies exist for determining the impact of changes in U.S. supply on world oil markets is contradicted by two recent environmental impact statements that employ modes of economic analysis to assess the agency decisions’ effects on oil and gas consumption and estimate their net contribution to greenhouse gas emissions.⁶⁰ In an April draft EIS, the Department of State employed modeling to estimate the Keystone XL Pipeline project’s impact on oil supplies and net greenhouse gas emissions.⁶¹ Likewise, the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) modeled the impact on world oil markets of their Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards.⁶² BOEMRE’s assertion is also inconsistent with its own internal analyses, which predict that conservation measures and switching to natural gas will increase if supply decreases.⁶³

The Council on Environmental Quality (CEQ)’s promulgation, on February 10, 2010, of draft guidance on the consideration of greenhouse gas emissions under NEPA also strongly counsels in favor of BOEMRE analyzing the greenhouse gas effects of the end-use of Chukchi Sea oil and gas. The guidance identifies 25 thousand tons of annual CO₂ emissions as a “useful indicator” of environmental significance under NEPA.⁶⁴ Combustion of oil and gas from Lease Sale 193 will generate far greater emissions than that. BOEMRE predicts that lease area 193 contains 12 billion barrels of oil recoverable with current technologies. “At a \$60 oil price, 8.4 billion barrels . . . could be economic to develop,” but BOEMRE assumes for purposes of environmental analysis that only one billion barrels will be produced as a result of the lease and

⁵⁸ *Id.*

⁵⁹ Revised Draft Supplement at 19.

⁶⁰ We are not in this letter providing comments on the methodologies employed by the State Department, Environmental Protection Agency or National Highway Traffic Safety Administration. The existence of these analyses, however, calls into serious question BOEMRE’s assertion that methodologies do not exist to predict the greenhouse gas consequences of Lease Sale 193.

⁶¹ U.S. Department of State, Keystone XL Project Supplemental Draft Environmental Impact Statement at 3-188 (April 22, 2011), available at <http://www.keystonepipeline-xl.state.gov/client-site/keystone-xl/0pen>.

⁶² U.S. Environmental Protection Agency (EPA), Draft Joint Technical Support Document for Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards at 4-29-4-32 (September 2009), available at <http://www.epa.gov/otaq/climate/regulations/420d09901.pdf>.

⁶³ MMS, Energy Alternatives and the Environment, OCS Report MMS 2001-096 at 11 (November 2001) (Energy Alternatives Report), available at <http://www.boemre.gov/itd/pubs/2001/2001-096.pdf>; MMS, Economic Analysis for the OCS 5-Year Program 2002-2007: Theory and Methodology, OCS Report MMS 2001-088, Figure 3 at 5 (Sept. 28, 2001), available at <http://www.boemre.gov/itd/pubs/2001/2001-088.pdf>.

⁶⁴ Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies re: Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions at 3 & n.2 (Feb. 18, 2010), available at <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>.

that annual production will peak at 80 million barrels.⁶⁵ With respect to natural gas, BOEMRE forecasts that 2.25 trillion cubic feet will be produced.⁶⁶ Burning a barrel of oil as fuel releases 43 tons of CO₂ equivalent,⁶⁷ and about 90% of oil consumed in the United States is burned as fuel.⁶⁸ Therefore, the one billion barrels of oil that BOEMRE assumes will be produced as a result of lease sale 193 will generate approximately 387 million tons of new greenhouse gas emissions.⁶⁹ For the years of peak production volumes, the contribution to global greenhouse gas emissions will be approximately 31 million tons each year. The burning of natural gas will add over 116 thousand tons over the life of the project.⁷⁰ These contributions to greenhouse gas emissions are so large that BOEMRE can no longer credibly conclude that they are minor, even allowing for some uncertainty concerning their magnitude. If BOEMRE concludes that the effect of new production on levels of consumption is determinable, it should not, in light of the CEQ's draft guidance, re-adopt its prior conclusion that the effect is minor.

BOEMRE is also incorrect in its new conclusion that the use of oil and gas for energy is not a foreseeable and proximate consequence of Lease Sale 193. BOEMRE has adopted one billion barrels of oil and 2.25 trillion cubic feet of gas as a foreseeable production scenario.⁷¹ Both BOEMRE and other agencies managing oil and gas resources routinely employ estimates of future production to guide analysis of environmental impacts under NEPA.⁷² NEPA requires the same approach with respect to greenhouse gas emissions. The lease sale stage, where BOEMRE is deciding whether and where to offer an area for oil and gas development, is the appropriate stage at which to analyze the greenhouse gas effects of the fuels that would be produced as a result of the sale.

⁶⁵ Final EIS IV-5, Revised Draft Supplement at 76-77.

⁶⁶ Revised Draft Supplement at 77.

⁶⁷ EPA, Green Power Equivalency Calculator Methodologies, Barrels of Oil Consumed, available at

<http://www.epa.gov/greenpower/pubs/calcmeth.htm>.

⁶⁸ Stephanie Clifford, Oil Oozes Through Your Life, N.Y. Times (June 25, 2001) ("About 46 percent of [a typical barrel of oil] is refined into gasoline, and another 40 percent or so is turned into jet and fuel oil. Only about 2 percent becomes petrochemicals like polyethylene and benzene for everyday products (with the rest going to other uses)."); U.S. Energy Information Administration (EIA), U.S. Refinery Yield, available at http://www.eia.gov/dnav/pet/PET_PNP_PCT_DC_NUS_PCT_A.htm; EIA, Annual Energy Review 2009, at 149 (Table 5.11), 182(Notes 1) (2010) (breaking down U.S. petroleum consumption by type for each year 1949-2009), available at <http://www.eia.gov/totalenergy/data/annual/pdf/aer.pdf>; see also Energy Alternatives and the Environment Report at 7 (MMS 2001) ("[T]he amount of oil going into [non-fuel industrial products] is much less than that which goes into energy applications, especially transportation.");

⁶⁹ Oil production from Lease Sale 193 will also reduce conservation and switching from oil to natural gas. The combustion of oil generates 164 thousand pounds of CO₂ per billion BTU of energy, while combustion of natural gas generates only 117 thousand pounds per billion BTU. U.S. Energy Information Administration, Natural Gas Issues and Trends at 58, Table 2 (1998), available at ftp://ftp.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/natural_gas_1998_issues_trends/pdf/chapter2.pdf

⁷⁰ 2.25 trillion cubic feet x 1 therm/96.7 cubic feet = 23.27 million therms. EPA's Greenhouse Gas Equivalencies Calculator (available at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>) yields this result in tons of CO₂ equivalent.

⁷¹ Final EIS IV-5, V-7; Revised Draft Supplement at 76-77.

⁷² Revised Draft Supplement at 77; Interagency Reference Guide Reasonably Foreseeable Development Scenarios And Cumulative Effects Analysis For Oil and Gas Activities On Federal Lands In The Greater Rocky Mountain Region at 10, 12 (2003), available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5173039.pdf.

IV. Natural Gas Development Analysis

As detailed in our November 30 comments the Original Draft Supplement's analysis of the effects of natural gas development fell short of what NEPA requires in a number of respects. It failed to adequately account for climate change, its scenario was unjustifiably limited, its dismissal of liquefied natural gas (LNG) tankering was unjustified, it failed to adequately analyze the effects of pipelines, it failed to adequately analyze the impacts on a number of species, and it failed to analyze the potential for displacement of subsistence users. With few exceptions, BOEMRE failed entirely to address these issues in its Revised Draft Supplement; moreover, the minimal alterations BOEMRE did make fall far short of providing meaningful analysis.

We previously commented that BOEMRE must address the impact natural gas development will have on black carbon emissions. The Revised Draft Supplement adds one sentence addressing black carbon emissions to its analysis.⁷³ BOEMRE now states:

The amount of black carbon associated with natural gas production would be relatively small on the appropriate global scale; the consumption[] of diesel, natural gas, and other fuels produces less black carbon as compared to oil and coal; and Clean Air Act regulations would require appropriate technological controls of these activities.⁷⁴

This addition does not address the issue BOEMRE fails to provide any actual analysis. It does not provide any estimate of the amount of black carbon that may be produced and the effect that black carbon may have on Arctic warming. More specifically, the agency's conclusion that the emissions "would be relatively small on the appropriate global scale" is arbitrary. BOEMRE offers no support for the contention that the "global scale" is "appropriate." Indeed, the assertion is flatly inconsistent with evidence we provided in our November 30 comments demonstrating that Arctic black carbon emissions have a drastically larger effect on Arctic warming than emissions occurring outside of the Arctic. BOEMRE's actions could introduce substantially more black carbon to the Arctic environment, where it is likely to have the most dramatic effect, and those effects must be analyzed.

BOEMRE has provided additional statements in the Revised Draft Supplement regarding the effect of natural gas development on marine and coastal birds. In reviewing whether onshore development could disturb birds, the agency states that "[a]dditional facility footprints were not considered necessary."⁷⁵ However, this statement appears to conflict with the agency's later statement that "natural gas development scenario entails expansion of the onshore facility"⁷⁶ The agency should address this apparent contradiction.

The agency also acknowledges that predators could be attracted to infrastructure or additional human foods or garbage, but concludes that such impacts are unlikely because the onshore development will occur in a manner that will not provide nesting or denning sites for

⁷³ Revised Draft Supplement at 88.

⁷⁴ *Id.*

⁷⁵ *Id.* at 102.

⁷⁶ *Id.* at 104.

predators, or generate additional human food or garbage to attract them.⁷⁷ This is also incongruous with BOEMRE's statement that natural gas development entails expansion of onshore facilities.⁷⁸ The expansion of facilities likely will result in more workers, meaning more food and garbage. Further, the agency does not provide a basis for its conclusion that development would not occur in a manner that provides additional nesting or denning sites.⁷⁹ The agency must explain this conclusion in light of the fact that "[a]rctic foxes are able to exploit man-made structures as denning sites."⁸⁰

BOEMRE must reconsider its approach to reanalyzing the effects of Lease Sale 193. The USGS report, along with the BP *Deepwater Horizon* Spill Commission Report, comments from NOAA, and other information presented here and in our November 30 comments demonstrate the inadequacy of BOEMRE's current analysis. BOEMRE should recognize that there is essential information missing about the Chukchi Sea, rescind the Revised Draft Supplement, obtain essential information, and prepare a new environmental impact statement that fully informs the remand decision to cancel, modify, or affirm Lease Sale 193. Should BOEMRE decide to reach a decision on the shorter schedule directed by the Alaska Federal District Court, it must explore alternatives that permit it to maintain the status quo on Lease Sale 193 leases pending the gathering of essential missing information to inform decisions about whether, where, and how to permit their implementation.

⁷⁷ *Id.* at 102, 104.

⁷⁸ *Id.* at 104.

⁷⁹ *Id.* at 102, 104.

⁸⁰ Petham, Craig J., *Arctic Fox Den Distribution and Activity Between the Sagavanirktok River and the Staines River, Alaska, Summer 2000* at 2 (Jul. 6, 2001), available at http://www.arlis.org/docs/vol2/point_thomson/1066/1066A_Arctic%20fox%20den%20distribution%20july%2006%202001.pdf.

Respectfully,

Cindy Shogan Executive Director ALASKA WILDERNESS LEAGUE	Rebecca Noblin Alaska Director CENTER FOR BIOLOGICAL DIVERSITY
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Mike Daulton Vice President, Government Relations NATIONAL AUDUBON SOCIETY	Charles M. Clusen Alaska Project Director NATURAL RESOURCES DEFENSE COUNCIL
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Faith Gemmill Executive Director REDOIL	Dan Ritzman Alaska Program Director SIERRA CLUB
Lois N. Epstein Engineer & Arctic Program Director THE WILDERNESS SOCIETY	Layla Hughes Senior Program Officer for Arctic Oil, Gas, and Shipping Policy WORLD WILDLIFE FUND

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- 2 David E. Bain, Statement Regarding National Marine Fisheries Service's Proposal to Issue an Incidental Harassment Authorization to Shell for Marine Mammal Takes in the Chukchi Sea (June 1, 2009)
- 3 Expert Panel Review of Monitoring Protocols in Applications for Incidental Harassment Authorizations Related to Oil and Gas Exploration in the Chukchi and Beaufort Seas, 2011: Statoil and ION Geophysical (March 9, 2011)
- 4 Comment Letter from National Marine Fisheries Service to Minerals Management Service Re. Draft Environmental Impact Statement (DEIS) for the Beaufort Sea and Chukchi Sea Planning Areas – Oil and Gas Lease Sales 209, 212, 217, and 212 (March 27, 2009)

IN THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

NATIVE VILLAGE OF POINT HOPE, *et al.*,) No. 09-73942
)
Petitioners,)
)
 v.)
)
 KEN SALAZAR, Secretary of the Interior, *et al.*,)
)
Respondents,)
)
 and)
)
 SHELL OFFSHORE INC., *et al.*,)
)
Intervenor-Respondents.)
)

ALASKA ESKIMO WHALING COMMISSION, *et al.*,) No. 09-73944
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Petitioners,)
)
 v.)
)
 KEN SALAZAR, Secretary of the Interior, *et al.*,)
)
Respondents,)
)
 and)
)
 SHELL OFFSHORE INC., *et al.*,)
)
Intervenor-Respondents.)
)

NATIVE VILLAGE OF POINT HOPE, *et al.*,) No. 10-70166
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Petitioners,)
)
 v.)
)
 KEN SALAZAR, Secretary of the Interior, *et al.*,)
)
Respondents,)
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 and)
)
 SHELL GULF OF MEXICO INC.,)
)
Intervenor-Respondent.)
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ALASKA ESKIMO WHALING COMMISSION, *et al.*,) No. 10-70368
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Petitioners,)
)
 v.)
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 KEN SALAZAR, Secretary of the Interior, *et al.*,)
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Respondents,)
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 and)
)
 SHELL GULF OF MEXICO INC.,)
)
Intervenor-Respondent.)
)

DECLARATION OF DAVID E. BAIN IN SUPPORT OF CASE NOS. 09-73942 AND 10-70166

I, DAVID E. BAIN, declare the following:

1. This Declaration is submitted in support of the Petitioners in Nos. 09-73942 and 10-70166. The statements contained in this Declaration are true and correct to the best of my knowledge and, in the case of my opinions, I believe them to be true based on my education and professional experience developed during my more than thirty years as a research biologist on marine mammals.

2. I am currently a contracting scientist for the National Marine Fisheries Service. I received my B.A. with majors in Biology and Psychobiology with Physics in 1980 and Ph.D. in Biology in 1989 from the University of California at Santa Cruz. A copy of my curriculum vitae is attached to this Declaration.

3. I have authored over 30 peer-reviewed papers and reports on the behavioral ecology of marine mammals, especially of killer whales (*Orcinus*). A substantial portion of this work has been concerned with audition, sound production, and other aspects of the acoustic ecology of these species. I have conducted studies for the National Marine Mammal Laboratory and other branches of the National Marine Fisheries Service, Minerals Management Service, and U.S. Geological Survey on the impacts of acoustic disturbance on individuals and populations of marine mammals. Reports based on these and other disturbance-related studies have been published in books and peer-reviewed journals and

presented at scientific meetings of the International Whaling Commission, the Society for Marine Mammalogy, and the Acoustical Society of America.

4. In preparing this Declaration, I have reviewed relevant parts of the Shell 2010 Camden Bay Drilling EA, the 2009 Shell Camden Bay FONSI, the Shell 2010 Chukchi Sea Drilling EA, the 2010 Shell Chukchi Sea FONSI, the July 2008 Bowhead Biological Opinion, "An Update on Feeding by Bowhead Whales near an Offshore Seismic Survey in the Central Beaufort Sea" (IWC SC/61/BRG3), and key papers cited by these documents.

5. The conclusions I draw and the opinions I express are supported by texts and research that are generally accepted as reliable by experts in my field. For reasons outlined below, I believe the proposed drilling projects pose a serious risk of harm to bowhead whales.

6. The flexibility in the drilling schedule allows for a wide range in the number of bowheads affected depending on the actual timing of the work.

7. The drill sites are central to the migration route of bowhead whales. As a result, a large proportion of the population will be exposed to the drilling project.

8. The Camden Bay sites are in a location where the migration corridor is narrow. This will require nearly all bowheads passing by a drill site while it is active to be exposed to biologically significant levels of noise.

9. The Chukchi Sea sites are in a location where the migration corridor is widening (see Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. Arctic. 53:432-447). Although this will bowheads to give a wider berth to drilling activities, the area is used by newly born calves, the members of the population most vulnerable to harm from disturbance.

10. Noise exposure is likely to result in stress. Stress can impair the immune system (Rolland, R. M., P. K. Hamilton, S. D. Kraus, B. Davenport, R. M. Gillett, and S. K. Wasser. 2006. Faecal sampling using detection dogs to study reproduction and health in North Atlantic right whales (*Eubalaena glacialis*). J. Cetacean Res. Manage. 8:121-125 and Romano, T. A., M. J. Keogh, C. Kelly, P. Feng, L. Berk, C. E. Schlundt, D. A. Carder and J. J. Finneran. 2004. Anthropogenic sound and marine mammal health: measures of the nervous and immune systems before and after intense sound exposure. Can J. Fish. Aquat. Sci. 61:1124-1134), resulting in an increase in mortality from disease.

11. The waters near the Camden Bay drill site include an important resting area. The noise associated with drilling and drilling support will likely divert whales away from this area. The loss of use of resting areas such as Camden Bay will require greater energy expenditure.

12. The waters near the Camden Bay drill site include an important feeding area. Industrial noise associated with drilling will deflect whales away from this feeding area. The loss of feeding areas will reduce food intake.

13. Taken together, these two factors will impair the energy balance of affected individuals (see Bain, D. E. 2002. A model linking energetic effects of whale watching to in killer whale (*Orcinus orca*) population dynamics. Contract report submitted to Orca Relief Citizens' Alliance).

14. Bowhead whales are a slow growing species (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 pp.). Impairing the energy balance will slow growth further. In turn, this will lead to delayed onset of sexual maturity. A consequence of this will be reduced recruitment of calves to the population.

15. Lactation requires approximately twice as much energy expenditure by new mothers than by non-reproductive females (Ofedal, O.T. 1997. Lactation

in whales and dolphins: evidence of divergence between baleen- and toothed-species. J. Mammary Gland Biol. Neoplasia 2:205-30). As a result, bowheads spend years storing the energy needed to reproduce successfully.

16. Impairing the energy balance will increase the interval between successful calf recruitment (Lockyer, C. 1984. Review of baleen whale (*Mysticeti*) reproduction and implications for management. Rep. Int. Whal. Commn (Spec. Iss. 6):27-50). In turn, this will result in a reduction in the number of calves recruited to the population.

17. Bowheads are a long-lived species, with some individuals living well over 100 years (George, J. C., J. Zeh, R. Suydam and C. Clark. 2004. Abundance and population trend (1978-2001) of Western Arctic bowhead whales surveyed near Barrow, Alaska. Marine Mammal Science, 20(4):755-773).

18. Such a long lifespan requires successfully overcoming disease. Many diseases inhibit feeding until the immune system overcomes the infection.

19. To survive this period of non-feeding, individuals must have an adequate blubber layer.

20. Impaired energy balance reduces the probability that an individual will survive an infection. In turn, this would lead to additional mortalities in the population.

21. Further, females who die young will not produce as many calves as they would have if they lived a normal lifespan.
22. The distance at which individuals will avoid the drill site will vary with a number of factors.
23. How much noise drilling operations will make will vary with conditions. In particular, managing ice requires production of high levels of noise (Richardson, W. J., Jr. C.R. Green., R. Malme and C. I. Thomson. 1995. Marine mammals and noise. Academic Press. San Diego).
24. Some individuals are disturbed by low levels of noise, and will avoid the drill sites by many tens of kilometers.
25. Most individuals are likely to be displaced by a couple tens of kilometers.
26. Some individuals are not easily displaced by noise, and will be exposed to noise levels which may cause temporary or permanent hearing loss (Camden Bay EA).
27. Hearing loss will impair their ability to hear vocalizations.
28. Vocalizations are important for finding mates. Failure to find mates could result in a reduction in calf recruitment.

29. Echoes from vocalizations are likely to provide important information on ice thickness. Failure to correctly assess ice thickness could result in an increase in mortality.
30. Predators can be detected at greater distances acoustically than visually by healthy individuals. Hearing loss would increase vulnerability to predation, which in turn could increase mortality.
31. Cumulative effects are of further concern. "The accumulation of impacts from vessels, seismic exploration, and drilling are of concern across the North Slope of Alaska," according to the Alaska Stock Assessment Report (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 p.).
32. That is, when looking at the biological impact on bowhead whales, drilling in the Beaufort cannot be considered separately from other planned activities, including similar activities in the Chukchi Sea.
33. Further, if exploratory drilling results in future production, the cumulative effect of production in the core of the migration route needs to be considered.
34. Cumulative effects on the population are likely to increase at a steeper than linear rate. That is, doubling exposure to disturbance is likely to more than

double population level effects (the life or death effects, Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (*Orcinus orca*) population dynamics. Contract report submitted to Orca Relief Citizens' Alliance).

35. The number of individuals that would be added to the population in the absence of disturbance can be estimated using the equation:

$$\Delta N / \Delta t = rN (1 - (N/K)^\theta)$$

where N is the current population size, K is the carrying capacity, r is the intrinsic rate of increase (i.e., the rate at which the population would grow in the absence of intraspecific competition), and θ is a shape parameter that specifies how population consequences of intraspecific competition vary with population size (Olesiuk, P. F., G. M. Ellis and J. K.B. Ford. 2005. Life History and Population Dynamics of Northern Resident Killer Whales (*Orcinus orca*) in British Columbia. CSAS Research Document 2005/045. 1-81).

36. Excluding whales from feeding areas effectively reduces K. In turn, this reduces the rate of population increase. This is equivalent to removing individuals from the population.
37. Excluding whales from resting areas requires individuals to expend more energy. Thus they need to eat more to survive. This effectively increases the amount of intraspecific competition, and hence reduces K. In turn, this reduces the

rate of population increase. This is equivalent to removing individuals from the population.

38. When the shape parameter is 1, the per capita growth rate peaks when the population is at 50% of carrying capacity.
39. However, for marine mammals, the shape parameter tends to be large. That is, intraspecific competition does not become important until the population size is closer to carrying capacity than 50%. However, intraspecific competition becomes much more important near carrying capacity when the shape parameter is large than when it is small.
40. Disturbance has the effect of causing the population to behave as though it is closer to carrying capacity than it would in the absence of disturbance. As a result, the population consequences of disturbance are much stronger when the population is near carrying capacity than when it is depleted.
41. As a result, a population that grows in the presence of disturbance is not a sign that disturbance is unimportant. Rather, depleted populations are capable of some growth in conditions that are obviously harmful to populations near carrying capacity (Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (*Orcinus orca*) population dynamics. Contract report submitted to Orca Relief Citizens' Alliance).

42. Bowheads are believed to be near carrying capacity now, although they would have been depleted when the population was still growing in the presence of disturbance (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 pp.).

43. That is, the depleted population was capable of growth in the presence of disturbance in the 1990's, but an increase in disturbance to the population now, while it appears to be near carrying capacity, could result in slowed growth or a loss of individuals.

44. This analysis suggests that there will be little difference in the effect on the population regardless of whether many individuals are affected a small number of times or a small number of individuals are affected many times or for a prolonged period of time.

45. The relative degree of exposure among individuals determines which individuals are likely to bear the burden of the population scale effects. That is, individuals extensively affected are less likely to be able to overcome the impact, whereas individuals little affected are more likely to be able to overcome the impact at the expense of non-exposed individuals as they more aggressively try to obtain the additional resources needed to offset short-term effects.

46. Individuals within a population near carrying capacity are more likely to die or experience reduced reproduction than individuals in populations well below carrying capacity, when exposed to disturbance (Bain, D. E. 2002a. A model linking energetic effects of whale watching to in killer whale (*Orcinus orca*) population dynamics. Contract report submitted to Orca Relief Citizens' Alliance).

47. That is, individuals in this bowhead population are quite vulnerable to harm from disturbance due to the proposed drilling project.

48. The methods used in the Eas to estimate the number of individual bowheads likely to be harmed systematically underestimates the expected and maximum numbers.

49. First, only individuals within the 120 dB contour were considered as subject to harm. In fact, lower levels of noise have been shown to deflect migrating bowheads and exclude them from habitat.

50. Second, Shell and MMS selected specific dates within the drilling season on which to base their estimates. However, given the flexibility in the drilling schedule requested, these dates may not be representative for the numbers of bowheads likely to present on the dates drilling would actually occur.

51. Third, only the number likely to be affected at any given moment was estimated. In practice, bowheads are likely to move past drilling sites. The result

is that many more individuals will be affected, although each individual will be affected for only a portion of the drilling season.

52. Fourth, the number affected was based on the mean density, with an arbitrary range of uncertainty assigned to the estimate. In practice, bowhead density can vary far more than allowed for in the EAs.

53. In particular, the tendency of some bowheads to travel in groups (Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. Arctic. 53:432- 447) means that if a group approaches a drill site, the density will be far higher than estimated based on individual density.

54. The estimate of summer counts at 5% of fall counts is arbitrary. The limited data available show higher numbers present (e.g., for the Chukchi Sea, see Ireland, D.S., W.R. Koski, T.A. Thomas, J. Beland, C.M. Reiser, D.W. Funk and A.M. Macrander. 2009. Updated Distribution and Relative Abundance of Cetaceans in the Eastern Chukchi Sea in 2006-8. IWC Scientific Report SC/61/BRG4).

55. The number of whales potentially exposed to noise should be calculated based on the number passing by the drilling site during operations, not

the average density. When bowheads are migrating, new individuals will be exposed on an ongoing basis.

56. The drilling plan allows for flexibility in the drilling schedule. As a result individual bowheads may be exposed multiple times. Although the average swimming speed may be high enough that a bowhead could swim from one site to the other faster than the drill ship would change sites, bowheads do not necessarily swim continuously and in a straight line. That is, they may stop to rest and feed. Their course may be indirect due to natural factors and as they avoid sources of disturbance. Such detours would allow the drill ship to relocate faster than some individual bowheads.

57. Repeated exposure of the same individual to multiple disturbance events increases the risk of long-term harm relative to single exposures.

58. The increase in vessel traffic associated with this project increases the risk of ship strike. Bowheads are known to be struck by ships (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 p.), and ship strike has become a leading source of mortality in the closely related North Atlantic Right Whale (Waring GT, Josephson E, Fairfield-Walsh CP, Maze-Foley K, editors.

2009. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments --

2008. NOAA Tech Memo NMFS NE 210; 440 pp.)

59. The recovery of the Bering-Chukchi-Beaufort stock (BCBS) is in contrast to the recovery of other stocks. There is no evidence that other bowhead stocks have increased, although data are limited (Reilly, S.B., Bannister, J.L., Best, P.B., Brown, M., Brownell Jr., R.L., Butterworth, D.S., Clapham, P.J., Cooke, J., Donovan, G.P., Urbán, J. & Zerbini, A.N. 2008. *Balaena mysticetus*. In: IUCN 2009. IUCN Red List of Threatened Species. Version 2009.2.

<www.iucnredlist.org>. Downloaded on 04 March 2010).

60. The Sea of Okhotsk stock may have been exposed to excessive harvest as part of illegal Soviet whaling. All stocks face potential impact from entanglement, vessel collisions, and disturbance (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 pp.).

61. Maintaining the BCBS bowheads is the best way to ensure survival of the species as a whole. Protecting them from expanding threats such as oil exploration and drilling, and the associated activities that may have limited the recovery of other stocks, are important steps in sustaining this species.

62. In summary, there is serious risk of harm to bowheads due to consequences of disturbance, direct injury due to exposure to dangerous levels of noise, and ship strike.

63. Belugas also occur in both the Chukchi and Camden Bay drilling areas during summer and autumn. Mothers with young would be expected in greater numbers than older males in the habitat closest to the drill sites.

64. Like bowheads, belugas rely on hearing for navigation, communication, and avoiding predation. In addition, belugas use echolocation to find prey (Au, W. W. L. 1993. The sonar of dolphins. Springer-Verlag, New York. 277 pp.).

65. That is, masking of echolocation signals by noise, temporary threshold shifts, and permanent threshold shifts will impair the ability of belugas to find food. This mechanism for harm is in addition to impaired ability to find food due to displacement from high quality feeding areas (Southall, B.L., A. E. Bowles, W.T. Ellison, J. J. Finneran, R. L. Gentry, C. R. Greene Jr., D. Kastak, D. R. Ketten, J. H. Miller, P. E. Nachtigall, W. J. Richardson, J. A. Thomas, P. L. Tyack. 2007. Criteria for behavioral disturbance. Aquatic Mammals. 33:446-473 and Finneran, J. J., C. E. Schlundt, R. Dear, D. A. Carder and S. H. Ridgway. 2002. Temporary shift in masked hearing thresholds in odontocetes after exposure to

single underwater impulses from a seismic watergun. J. Acoust. Soc. Amer. 111:2920-2940).

66. Belugas are known to be highly disturbed by icebreaker noise over 50 km away.

67. In contrast, the EA estimates the number of belugas to be affected only out to the 120 dB contour at 7.4 km.

68. This seriously underestimates the number of belugas to be affected not only due to the underestimate of the area of the zone of influence but also due to higher densities of belugas 50 km offshore of the drill site than within 7.4 km of the drill site (see Moore, S. E., D. P. DeMaster, and P. K. Dayton. 2000. Cetacean habitat selection in the Alaskan Arctic during summer and autumn. Arctic. 53:432- 447).

69. Masking of communication signals is also likely to be a problem at this distance. Although beluga communication signals contain high-frequency components that are less vulnerable to masking by low frequency noise than low-frequency components, the high-frequency components are directional and attenuate faster than low-frequency components. That is, the omni-directional low-frequency component used for long distance communication among widely spaced belugas is vulnerable to masking (see Miller, P. J. O. 2006. Diversity in

sound pressure levels and estimated active space of resident killer whale vocalizations. J Comp Physiol A Neuroethol Sens Neural Behav Physiol. 192:449-59 and Bain, D. E. and M. E. Dahlheim. 1994. Effects of masking noise on detection thresholds of killer whales. In (T. R. Loughlin, ed.) Marine Mammals and The Exxon Valdez. Academic Press. N.Y. 243-256).

70. Support vessel traffic will be disturbing to the part of the beluga population using lagoons and other nearshore habitats.

71. The project is scheduled to begin at about the same time as the peak of the beluga calving season (O’Corry-Crowe, G. (2002). “Beluga Whale *Delphinapterus leucas*”. in Perrin, W., Würsig B. and Thewissen, J. *Encyclopedia of Marine Mammals*. Academic Press. p. 94-99).

72. Beluga females are likely to require two to four times as much food while lactating to successfully rear a calf than while pregnant (Oftedal, O.T. 1997. Lactation in whales and dolphins: evidence of divergence between baleen- and toothed-species. J. Mammary Gland Biol. Neoplasia 2:205-30 and see Bain, D. E., and J. Olhiser. 1994. Factors affecting food intake of killer whales and dolphins. Paper presented to the International Marine Animal Trainers Association Conference. Tacoma, WA).

73. Unlike bowheads, belugas cannot store sufficient blubber to successfully rear calves when food intake is reduced.
74. In addition to lactation, wake riding is an important mechanism for transferring energy from the mother to a calf. The energetic cost of this increases dramatically with increased swimming speed as may occur in the event of flight from disturbance.
75. Like bowheads, not all belugas flee from noise sources all the time. That is, some belugas may be exposed to injurious levels of noise (Camden Bay EA and National Research Council. 2003b. Ocean noise and marine mammals. National Academies Press. Washington, DC. 192 pp.).
76. Population censuses of the Eastern Chukchi and Beaufort stocks of belugas have not been conducted in the last 10 years. Therefore, population trends are unknown. In contrast to bowheads, no evidence of population growth was seen when censuses were still being conducted (Angliss, R. P., and B. M. Allen. 2009. Alaska marine mammal stock assessments, 2008. U.S. Dep. Commer., NOAA Tech. Memo. NMFS AFSC-193, 258 p.).
77. In summary, drilling will not take place within the core of the beluga distribution or migration route, but the belugas most likely to occur near the drill

sites, mothers with calves under 6 months of age, are the most vulnerable to harm from the project.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge.

Dated: March 5, 2010

David E. Bain
David E. Bain

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ACADEMIC BACKGROUND

University of California at Davis (Post-Doctoral Fellow)	1989-1991
University of California at Santa Cruz (Ph.D. in Biology)	1981-1989
San Francisco State University (Master's program in Biology)	1980-1981
University of California at Santa Cruz (B.A., with majors in Biology and Physics with Psychobiology)	1978-1980
New College, University of South Florida	1977-1978
NSF Summer Science Training Program, Humboldt State University	1976
University of Maryland at College Park (summer sessions)	1974,1975

EXPERIENCE

Contractor, National Marine Fisheries Service,	1990-Present
Research Director, Global Research and Rescue,	2005-2007
Visiting Scientist, The Whale Museum,	2000-2006
Affiliate Assistant Professor of Psychology, University of Washington,	1993-2006
Killer Whale Research Director, Marine World Foundation,	1979-2001
NRC Research Associate at National Marine Mammal Laboratory,	1991-1992
Post-Doctoral Fellow, University of California at Davis	1989-1991
Consultant for Active Environments	1990-1991
Consultant for Dolphin Research Center	1990
Research Assistant, University of California at Santa Cruz	1987
Teaching Assistant, University of California at Santa Cruz,	1982-1986
Computer Programmer, Satellite Business Systems,	1980
Research Assistant, Marine World Research Foundation,	1978-1979

AFFILIATIONS

Charter Member, Society for Marine Mammalogy
Director, Cascadia Environmental Science Center
Science Advisor, Killer Whale Tales
Science Advisor, Global Research and Rescue

SERVICE

Peer-reviewer for the SRKW ESA listing and draft Critical Habitat designation
Member of the Killer Whale Recovery Team convened under SARA in Canada

AWARDS AND HONORS

National Research Council Research Associateship,	1991-1992
American Cetacean Society, Monterey Bay Chapter, Award,	1982
National Science Foundation Graduate Fellowship,	1981-1984
B.A. with Honors with Majors in Biology and Physics with Psychobiology, University of California at Santa Cruz,	1980
New College Out-of-State Tuition Waiver,	1977
Earthwatch Scholarship,	1977
National Science Foundation Summer Science Training Program at Humboldt State University,	1976
Johns Hopkins University Study of Mathematically and Scientifically Precocious Youth, Scholarship,	1974

FUNDING HISTORY

National Marine Fisheries Service Contracts, 1990-present,	\$740K
Earth Island Institute, Contract	2K
Northwest Straits Commission Grants, 2001-2002	60K
Orca Relief Citizens Alliance Grant, 2001	4K
Center for Biological Diversity Contract, 2001	2K
Oiled Wildlife Care Network Grant, 2000-2001	20K
Anonymous Donation, 1999-2002	250K
Marine World Grants, 1987-2001	400K
Minerals Management Service, 1998-99	60K
The Whale Museum Contracts, 1997-2001	14K
Woods Hole Oceanographic Institution, 1997-1999	4K
United States Geological Survey 1997-1998	15K
BioRad Laboratories, 1997	9K
National Academy of Sciences COBASE Project Development Grant, 1995	2K
British Columbia Ministry of Parks Contract, 1995	2K
National Research Council Research Associateship, 1991-1992	30K
Institute of Museum Services Conservation Grant, 1991-1992	25K
National Science Foundation Doctoral Dissertation Research Improvement Grant 1985-1987	5K
National Science Foundation Graduate Fellowship, 1981-1984	20K

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- Schroeder, J. P., S. Raverty, C. Cameron, E. Zabeck, A. Eshghi, D. Bain, B. Wood, L. Rhodes, and B. Hanson. 2009. Investigation into the Microbial Culture and Molecular Screening of exhaled breaths of Endangered Southern Resident Killer Whales (SRKW) and Pathogen Screening of the Sea-Surface Microlayer (SML) in Puget Sound. Poster presented to the Puget Sound Georgia Basin Conference. Seattle, WA.
- Raverty S., E. Zabeck, J. P. Schroeder, R. Wood, D. E. Bain and C. E. Cameron. 2007. Preliminary investigation into the microbial culture and molecular screening of exhaled breaths of southern resident killer whales (*Orcinus* sp) and pathogen screening of the sea-surface microlayer (SML) and sub-surface water samples in Washington state. Poster presented to the Int. Assoc. Aquatic Anim. Med. Conf.
- Bain, D. E. 2006. The middle-ear reflex: a route to the "fingernails on the blackboard sound?" Abstract submitted to the Symposium on Fisheries Depredation by Killer and Sperm whales. Vancouver, BC.
- Bain, D. E. 2003. A quantitative estimate of the relative importance of factors in the decline of Southern Resident Killer Whales (*Orcinus orca*). Abstract submitted to the 15th Biennial Conference on the Biology of Marine Mammals. Greensboro, NC.
- Bain, D. E., A. Trites and R. Williams. 2001. Energy flux as a mechanism for estimating population scale effects of "minor" disturbance from noise and other human activities. Abstract submitted to the Society for Marine Mammalogy Conference. Vancouver, BC.
- Duncan, S., M. Dougherty, J. King, D. Bain and S. Hawks-Johnson. 2001. The application of an unmanned vessel to killer whale and other cetacean research. Abstract submitted the Society for Marine Mammalogy Conference. Vancouver, BC.
- Wade, P. R., K. C. Balcomb, and D. E. Bain. 2001. Population dynamics of southern resident killer whales, with an examination of the recent decline. Abstract submitted the Society for Marine Mammalogy Conference. Vancouver, BC.
- Dahlheim, M., H. Braham, S. Moore, K. Stafford, C. Fox and D. Bain. 1996. Acoustic detection of large whales. Abstract submitted to the Mexican Marine Mammal Conference.

- Moore, S. E., K. M. Stafford, D. E. Bain, M. E. Dahlheim, C. G. Fox and H. W. Braham. 1996. Development of passive acoustic techniques to investigate large whale habitat use in the Eastern North Pacific. Abstract submitted to the IWC Climate Change Symposium.
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STATEMENT REGARDING NMFS'S PROPOSAL TO ISSUE AN IHA TO SHELL FOR MARINE MAMMAL TAKES IN THE CHUKCHI SEA (74 Federal Register 26,217, June 1, 2009)

by David E. Bain, Ph.D.

I have over 30 years experience working on marine mammal acoustics. I have a B.A. in Biology and Psychobiology with Physics and a Ph.D. in Biology from the University of California at Santa Cruz. I have worked as contractor for government agencies including the National Marine Fisheries Service, US Geological Survey, Minerals Management Service, and National Research Council, as well as for non-governmental organizations and the University of Washington and the University of California at Davis. I have received grants from the National Science Foundation and National Academy of Sciences. My work experience includes field research on marine mammal behavior in the presence of both large airgun arrays and a small airgun, as well as mid-frequency sonar. I have extensively studied the effects of vessel traffic on killer whales. I have conducted studies on killer whale hearing. I have studied the use of noise to displace killer whales from unsuitable habitat. I have studied sound propagation in both shallow and deepwater habitats. I have been an observer shipboard line transect surveys. I have conducted research at night using a variety of light enhancement and infrared imaging devices, as well as passive acoustic monitoring equipment. I have worked with sick and injured stranded cetaceans. The comments below are based on my training and experience and a review of the application and relevant texts.

General comments

The methods employed by NMFS for calculating marine mammal density are confusing. The proposal addresses data in Moore *et al.* (2000), as corrected following Richardson and Thomson (2002). Although additional industry surveys are referenced, the estimates of Funk *et al.* (2006) are ignored. Further, in some cases (e.g., bowheads), although corrected data from Moore *et al.* (2006) are available, they are ignored in favor of model results, which have no empirical support. It is not clear how corrections were made, as the application indicated species specific values for $g(0)$ and $f(0)$ were used. However, these values are dependent on the species and the observation platform used and sighting conditions involved, not just the species. While no on-effort sightings during surveys were reported for some species, the probability of detecting any individuals given the effort level and assumed density was not reported.

As NMFS noted, there is no reason to believe maximum density is likely to be twice the mean density. For gregarious animals like odontocetes, actual densities can easily be zero or well over 100 times the mean density in a given area at a given time. While the mean density may be used in some cases to calculate a best estimate of take, maximum estimates should be considered as well to ensure worst case scenarios do not pose an unacceptable threat to a population.

Seismic surveys and shallow hazard surveys may impact marine life through a variety of mechanisms (Gordon *et al.* 2003). NMFS distinguishes two types of takes: Level A, in which there is immediate injury or death; and Level B, in which there is no immediate injury, but cumulative exposure may lead to harm at the population level. However, in certain contexts, Level B harassment may lead to Level A takes through indirect mechanisms.

The population effects of Level A takes on populations are relatively easy to assess, as individuals that are killed are obviously removed from the population, and those that are injured are more likely to die whenever the population is next exposed to stress.

Calculating the population effects of Level B takes is a topic of contemporary research (Trites and Bain 2000). For example, Bain (2002a) explored using energetic consequences of behavior change in conjunction with population dynamics models to estimate population effects of Level B takes. Stress concurrent with Level B harassment would have additional population consequences. Stress may occur in the absence of behavioral change, or the absence of change in significant behavioral patterns such as foraging or nursing, or exclusion from optimal habitat. Lusseau *et al.* (2006) concluded disturbance caused a decline in and posed a significant threat to the survival of the bottlenose dolphin population in Doubtful Sound, New Zealand. While they noted vessel strikes were occurring (Level A takes), cumulative behavioral effects (Level B takes) were believed to be the primary threat to the population. That is, the population declined without being exposed to noise above 160 dB.

It is likely that different magnitudes of effect, whether physical harm, behavioral change that leads to physical harm, disruption of significant behavioral activities, or behavioral changes that pose negligible risk to populations when they occur only rarely but can become significant when exposure is prolonged or repeated, will have different relationships to noise. The different magnitudes of takes will have different population consequences. Further, the population consequences can depend on the health of the population (Bain 2002a). All these factors need to be considered when evaluating the environmental consequences of exposing marine mammals to noise.

Unconditional Effects

Richardson *et al.* (1995) addressed the concept of zones of influence. The zone of most concern is the one in which there is risk of immediate injury or death. Three primary mechanisms have been proposed to be of concern. One is damage to the ears that causes permanent threshold shifts (PTS) (Syka and Popelar 1980, Blakeslee *et al.* 1978, Nielsen *et al.* 1978, Solecki and Gerken 1990, Clark 1991, McCauley *et al.* 2003). There is great uncertainty over received levels that may cause this. Estimates have been based on research on a handful of terrestrial mammals, birds, and fish. An often stated assumption is that the threshold for PTS must be higher than the threshold for Temporary Threshold Shift (TTS), which has been addressed in a few marine mammal species (Nachtigall *et al.*

2003, Kastak *et al.* 2005, Finneran *et al.* 2002 and 2005). However, in humans, chronic exposure to levels of noise too low to generate a TTS can result in PTS (Henderson *et al.* 1991, OSHA 2007). Animal models (e.g., rats, cats, monkeys, chinchillas) have been used for tests of noise causing permanent physical harm (Henderson *et al.* 1991, Gao *et al.* 1992, Blakeslee *et al.* 1978, Clark 1991). Damage to hearing from noise exposure is an example of unconditional injury from noise. OSHA (2007) requires limiting human exposure to noise at 115 dB above threshold (equivalent to 145 dB re 1 μ Pa for killer whales, Szymanski *et al.* 1999) to 15 minutes. Although the reference levels for sound in air and water are different, this difference is taken into account when determining thresholds.

While OSHA's standards are for continuous noise and assume multi-year exposure, surveys employ multiple intermittent sources, which, in a reverberant environment, have the potential to become nearly continuous, much like the noise generated by the survey vessel itself. While individual projects will cause limited exposure to individual marine mammals, these individuals will accumulate exposure from natural sources (e.g., wind noise) as well as all human activities (e.g., other seismic sources, vessel traffic) conducted over the course of their lifetime.

While high levels of noise lead to TTS and PTS that impair hearing even after exposure to noise has ended, hearing ability can also be impaired by masking during exposure to low levels of noise. Masking can lead to increased risk of predation and reduced foraging efficiency (see Au *et al.* 1988, Bain and Dahlheim 1994, Fisheries and Oceans Canada 2008).

Stress reactions are another available index (e.g., Romano *et al.* 2004). Ayres (personal communication) found evidence suggesting that whale watching results in increased levels of stress hormones in wild killer whales.

Conditional Effects

Changes in behavior resulting from noise exposure could result in indirect injury in the wild. A variety of mechanisms for Level B harassment to potentially lead to Level A takes have been identified.

Flight may lead to injury in some species. Exhaustion from rapid flight leading to heart or other muscle damage (Williams and Thorne 1996) could also account for increased mortality such as was observed in harbor porpoises following sonar exercises in Juan de Fuca and Haro Straits in April and May of 2003. Harbor porpoises, in contrast to Dall's porpoises, rarely engage in sustained high energy activities such as rapid swimming or bow riding, and hence are less adapted to long distance flight responses.

Even successful flight may have negative survival consequences. Although many noise exposure protocols consider movement of animals out of the area an acceptable outcome, as the animals are not exposed to high levels of noise, such movement requires

expenditure of significant amounts of energy. Assuming animals were in optimal habitat, moving out of that habitat is likely to have consequences such as reduced foraging efficiency. This is of particular importance in the Arctic, where nutrients from fresh water sources, ice cover, bottom topography, currents, and other factors influence prey density (NRC 2003a, MMS 2004). Such factors vary temporally, resulting in the location of patches of high quality habitat varying through time. Feeding studies noted that prey density averaged 230 mg/m³, while feeding appears to require a density of 800 mg/m³ for bowheads (MMS 2004). Such highly productive patches are likely to be rare, so displacement from these areas would negatively affect individuals. While large whales can go extended periods of time without eating much, small cetaceans (e.g., harbor porpoises), along with individuals in poor condition, face a risk of death if they are unable to feed for periods as short as 48-72 hours (personal observation). They may also move into habitat where they face increased risk of predation.

Separation of individuals from social units is another consequence of noise exposure that may lead to mortality. In 2003 in Haro Strait, some killer whales responded to mid-frequency sonar by seeking shelter behind a reef. Others chose to flee, resulting in splitting of a pod that historically spent all of its time together as a single unit. While no deaths resulted from this particular incident, other killer whales have been observed separated from their social units resulting in death prior to reunion or requiring human intervention to restore the individual to its social unit (Schroeder *et al.* 2007).

TTS may conditionally lead to harm. Impaired hearing ability increases vulnerability to ship strike. In 2003, blunt force trauma was identified as a cause of death in the investigation of harbor porpoise mortalities following exposure to mid-frequency sonar in Washington State. A minke whale was nearly struck by a research vessel in the area where one had been observed fleeing mid-frequency sonar exposure. These species are familiar with boats in that area, and normally avoid them by a wide margin when they can hear them coming (personal observation).

Impaired auditory ability may also increase predation risk. For example, Dahlheim and Towell (1994) reported an attack by killer whales on white-sided dolphins. The approach by the whales went undetected due to the noise of the research vessel. Further, impaired hearing may impair foraging ability and communication (Bain and Dahlheim 1994).

Relationship of Noise Level to Impact

Major behavioral changes appear to be associated with received levels of around 135 dB in killer whales. Bain and Dahlheim (1994) observed major behavioral changes in a captive killer whale exposed to 135 dB (in a band below 5 kHz), and Bain (1995) used noise with a received level of around 135 dB (with a predominant frequency at 300 Hz) to drive killer whales from Barnes Lake, where two individuals in the group had previously died rather than leave. Killer whale watching guidelines prohibit close approaches that would result in received levels exceeding approximately 135 dB (Bain 2001). Olesiuk *et al.* (2002) found noise from acoustic harassment devices with a source

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level of 195 dB excluded harbor porpoises within a radius of 3 km (individuals may have been kept farther away, but porpoises are difficult to see at all beyond that range), where received levels probably dropped below 135 dB. Belugas have been observed to respond to icebreakers by swimming rapidly away at distances of up to 80 km, where received levels were between 94 and 105 dB. Bowheads appeared to be displaced to distances of about 20-30 km when seismic devices were inactive, and distances of 30-40 km when airguns were active (Miller *et al.* 1999), suggesting major behavioral effects to noise in the 105-125 dB range (NRC 2003b). Morton and Symonds (2002) not only excluded killer whales from the area around the devices, they kept them from accessing the area beyond the devices. It is reasonable to conclude that site clearance surveys could similarly prevent various whale species from accessing areas around the surveys.

Minor behavioral changes can occur at received levels from 90-110 dB re 1 µPa or lower. Porpoises avoid pingers with source levels of about 130 dB at distances of from 100-1000 m, depending on experience and environmental context (Bain 2002b, Barlow and Cameron 1999, Cameron 1999, Cox *et al.* 2001, Gearin *et al.* 1996 and 2000, Kraus *et al.* 1997, Laake *et al.* 1997, 1998, 1999). Kastelein *et al.* (1997, 2001) found behavioural responses to even lower levels. Bain *et al.* (2006ab) and Williams *et al.* (2002ab, 2009) found killer whales exhibited behavioral changes in the presence of a single vessel producing a received level in the neighborhood of 105-110 dB re 1 µPa. Belugas exhibited minor behavioral changes such as changes in vocalization, dive patterns and group composition at distances up to 50 km (NRC 2003b), where received levels were likely around 120 dB. It should be further noted that these behavioral responses occurred where noise was barely detectable above ambient noise, suggesting that noise whose total level is below ambient but occurs at a frequency where ambient noise is low may have effects. In addition, the range at which effects are observed would be expected to vary with natural ambient noise, with effects occurring at greater ranges on quiet days and shorter distances on noisy days. North Atlantic right whales exhibited changes in diving behavior when exposed to noise below 135 dB (Nowacek *et al.* 2004).

It is clear from the above review that marine mammals respond to noise at levels far below 160 dB. Thus implications of takes must be considered at far lower received levels of noise, which will occur over much larger areas, and hence affect much greater numbers of individuals than when 160 dB or higher is set as the threshold for concern. There are three main ways that minor behavioral changes, when experienced by numerous individuals for extended periods of time, can affect population growth. These include increased energy expenditure, reduced food acquisition, and stress (Trites and Bain, 2000).

Whales typically are active part of the time and rest part of the time. Traveling around a noise source replaces resting with active time. Marine mammals typically have a metabolic scope of about 6. That is, energy consumption at rest is about 6 times lower than fast travel. In killer whales, travel at moderate speeds requires expenditure of about twice the energy as resting (Kriete 1995).

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When whales are displaced from optimal habitat, rates of energy acquisition are reduced. As noted above, whales typically forage where prey density is at least four times higher than average prey density. Thus displacement from optimal foraging habitat may result in a four-fold reduction in food intake.

The actual situation may be worse, as foraging may be abandoned altogether when conditions are poor. For example, killer whales are 40% less likely to forage at all when vessels are nearby (Lusseau *et al.* 2009), perhaps because vessel noise masks echoes from prey, making the probability of foraging successfully negligible (Bain and Dahlheim 1994). This likely reduction in food intake is significant to food limited populations (e.g., killer whales: Ford *et al.* 2005, Olesiuk *et al.* 2005, Fisheries and Oceans Canada 2008).

These energetic consequences are most significant to a population approaching carrying capacity, as bowheads are (Angliss and Outlaw 2008). The increased competition with conspecifics that consume more energy than they would if undisturbed, and reduced effective carrying capacity due to inaccessibility of prey protected by anthropogenic noise could be used in conjunction with population dynamics models to calculate the net change in population growth rate resulting from reduced fecundity and increased mortality (Bain 2002a).

In addition to energetic consequences, stress can increase mortality rates through impairing the immune system and reduce calf production through abortion of fetuses or prevention of conception (Rolland *et al.* 2006).

Sound Sources

Sound sources are typically divided into continuous and pulsed categories. This recognizes the different mechanisms for injury. Direct injury is typically related to the cumulative exposure. This depends on the total duration of the sounds. Intermittent sounds produce effects while signals are received, but not in the "silence" between pulses.

However, behavioral effects are related to received level rather than cumulative sound energy. That is, behavioral effects last beyond noise exposure. As long as the next pulse is received before behavior returns to normal, the behavioral effects are likely to be independent of the repetition rate and duty cycle, and depend primarily on the duration of the survey.

The exception to this is when masking causes behavior changes. In this case, reverberation becomes important. Intermittent pulses can result in continuously received noise when sound arrives via multiple paths. That is, sound that bounces between the bottom and the surface will take longer to reach an animal than sound traveling via a direct path. If the range of travel times is longer than the interval between pulses, the sound will effectively be continuous. In fact, noise can mask signals for a brief period

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before and after it is received, meaning an almost continuous received noise can mask signals continuously.

Another characteristic of pulsed sources is known as the "time-bandwidth" product. That is, any sound with a finite duration (that is, any real-world sound) contains additional frequencies to the nominal frequency. That is, pulsed sources that nominally have a frequency that is too low or too high to hear, may, in fact, be audible, as the source may contain other frequencies that are detectable. Similarly, directional sources and arrays produce significant energy in directions other than their primary direction.

Number of Takes

Underestimate of Bowhead Takes

In addition to overestimating the noise threshold for takes, NMFS has underestimated the number of bowheads likely to be taken for two reasons. First, during migration, the number of whales likely to be exposed to noise is higher than during the feeding season. Second, NMFS has used models to estimate density in the Chukchi from data in the Beaufort that underestimate the numbers observed empirically.

Takes during migration versus feeding

When estimating number of takes, it is important to know whether individuals have little net movement, as would be the case for individuals in a feeding area, or are passing through as would be the case for migrating individuals.

In the case where there is little natural movement, the number of individuals in the ensouffled area is an index of the number of takes. Exposed individuals can accumulate noise exposure or move out of the area. Assuming optimal foraging, displaced individuals will move to poorer feeding areas or compete with individuals for food in comparable habitat. When competition outside the ensouffled area occurs, the fitness of all individuals involved will be reduced, although only those exposed to noise are typically counted as taken.

However, when individuals are migrating through an area, new individuals are exposed to noise as they approach the noise source. Rather than estimating takes based on density in the ensouffled area, it is more appropriate to draw a line across the ensouffled area and estimate the number of individuals that would be expected to cross that line during the survey.

For example, Funk *et al.* (2006) estimated bowhead density at 3 / 100 km² in offshore waters in mid-season. The 120 dB contour is at about 23 km, giving a diameter of the ensouffled area (1661 km²) of about 46 km. Initially, 50 whales would be in the

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ensonified area, and this would be an estimate of takes if whales and sound source were relatively stationary.

A 46 km by 4.5 km box (the diameter of the ensonified area by the one hour travel time at a typical migration speed for bowheads reported by Koski *et al.* [2002]) on average would contain 6 whales in area of about 200 km². At a migration speed of 4.5 km/h, it would take an hour for these 6 whales to pass the sound source. In the same time, on average, another 6 whales would enter the area. How many whales would approach the sound source depends on how long the survey operated during the migration. For example, in 24 hours, approximately 144 whales would enter the ensonified area or be deflected to avoid it. In 21 days, over 3,000 individuals (21 days times 144 / day) would be exposed. As can be seen, the number of migrating whales exposed is far higher than would be the case if the sound source and whales were relatively stationary. These calculations are not intended to be exact. The longer the overlap between the survey and the migration, the more whales will be taken. The timing of the survey and migration will be important as the average density of bowheads is ten times higher in mid-season than early season (Funk *et al.* 2006). Location and speed of migration vary from year to year and also will be important. For example, numbers approaching the ensonified area would be highest at the peak of the migration, along the core of the migration route, and when migration speed is high. The numbers used here are well within the range of possibilities and serve to illustrate that far more whales might be exposed during migration than during a feeding season. As noted in the application, whales are expected to be migrating during much of the survey period.

Failure of density models

NMFS modeled takes in the Chukchi in September based on sightings in the Beaufort. However, the model is demonstrably inaccurate based on existing data from the Chukchi. Further, NMFS misinterpreted the data that form the basis of their extrapolation.

NMFS cites three reasons for believing densities would be 20 times lower in the survey area than in the Beaufort in September. First, NMFS claims the migration corridor is narrower in the Beaufort. While this may be true to some degree, this is irrelevant. The reported density for the Beaufort depends on how well the survey design identifies the corridor boundary. Regardless of whether the average density is correctly identified, the density will vary across the corridor. That is, when the corridor widens, the average density will decline, but concentrations may still occur, as appears to be the case for the survey area (see plot in Moore *et al.* 2000).

Second, NMFS maintains that bowheads are more likely to migrate non-stop through the Chukchi, in contrast to the Beaufort where they sometimes linger. As discussed in detail above, this will increase rather than decrease the number of whales taken.

Third, NMFS states that most of the whales will migrate north of the survey area. To the contrary, the survey area is in the center of the migration route. Quakenbush (2007)

tagged two bowheads. The tag worked well on one and provided a detailed track (see Figure 1). The other bowhead was tagged near the first in Alaska, and gave some locations near the first in Russia. However, the tag did not work well on the second, so there is no record of the path actually taken from the Chukchi to Russia. As can be seen in Figure 1, the first whale passed directly through the survey area. In addition, Moore *et al.* (2000) plotted bowhead sightings in autumn. These are also shown in Figure 1. At the longitudes of the survey area, the bulk of the sightings are the same distance offshore as the survey area, not north of it. Finally, Funk *et al.* (2006) found many bowheads nearshore, not north of the survey area as anticipated by NMFS.

Since the assumptions upon which NMFS based its model are faulty, one would expect available data to contradict the model, and this is, in fact, the case. The model estimated offshore abundance in September to be between 0.0011 and 0.0021 / km² depending on ice cover. However, Funk *et al.* (2006), using more recent data from the Chukchi than the data in Richardson and Thomson (2002) from the Beaufort used by NMFS, found mid-season offshore densities to be 0.03156 / km². That is, NMFS' model underestimates density by a factor of almost 30 for the latter part of the survey season.



Figure 1. Bowhead use of the survey area. Lease blocks in the survey area are shown as pink squares (Ireland *et al.* 2009). The yellow line with pink triangles shows the migration route of a satellite tagged bowhead (Quakenbush 2007). Dark circles are autumn bowhead sightings from Moore *et al.* (2000).

NMFS used a second model for estimating August densities. Although no bowheads were sighted in formal surveys in the Chukchi summarized in Moore *et al.* (2000), NMFS calculated density as though one whale was seen. The model performs a little better than the September model. It predicts densities will range from 0.0004 to 0.0008 / km². Observed early season densities were 0.00309 (Funk *et al.* 2006), or about 7.5 times higher than predicted by NMFS.

The reason this model fails is that it assumes only one bowhead was missed. Even if NMFS concluded estimating abundance from missed sightings rather than existing sighting data were the best approach, the assumption of one missed sighting is the wrong methodology. Rather, NMFS should identify the lowest density which would result in a small probability that all whales would be missed (scientists typically use 0.05, 0.01, or 0.001 as the definition of a "small probability").

Richardson and Thomson (2002) noted whales might be missed because they are underwater, the whales are at the surface near the track line but are not noticed, and they are at the surface but are hard to see because they are not close enough to be easily seen. Further, sighting conditions such as sea state, glare, fog, etc. can increase the chance that whales will be missed. While these factors can be incorporated in corrections when calculating abundance, adverse sighting conditions reduce the chance that any individuals will be sighted during a survey.

In summary, the models used for estimating bowhead density are based on faulty assumptions and underestimate bowhead density by an order of magnitude.

Underestimate of Effects on Harbor Porpoises

Two main factors have contributed to the underestimate of the effects of the proposed survey on harbor porpoises. First, harbor porpoises are far more easily disturbed by noise than the default marine mammal. Second, it is likely that the affected harbor porpoise stock is far smaller than currently recognized. In addition, it is possible that levels of takes from other sources are higher than currently recognized, and that density estimates are too low.

As noted above, Olesiuk *et al.* (2002) found noise from acoustic harassment devices with a source level of 195 dB excluded 95% of harbour porpoises within a radius of 3 km (individuals may have been kept farther away, but porpoises are difficult to see at all beyond that range), where received levels probably dropped below 135 dB.

Behavioral changes, including exclusion from an area, can occur at received levels from 90-110 dB re 1 µPa or lower. Porpoises avoid pingers with source levels of about 130 dB at distances of from 100-1000 m (received levels around 70-90 dB), depending on experience with the noise source and environmental context (Bain 2002a, Barlow and Cameron 1999, Cameron 1999, Cox *et al.* 2001, Gearin *et al.* 1996 and 2000, Kraus *et al.* 1997, Laake *et al.* 1997, 1998, 1999). Kastelein *et al.* (1997, 2001) found behavioural

responses to even lower levels. That is, porpoises are likely to exhibit short-term (weeks) exclusion to the 70 dB contour, and long-term exclusion to the 90 dB contour (throughout the survey period).

Ireland *et al.* (2009) reported received levels from 2 x 10⁻³ and 4 x 10⁻³ arrays (p. 3-73). They provided equations that fit the data, which allows calculation of received level contours. Takes were calculated based on the location of the 160 dB contour, which occurs at about 750-1250 m depending on array size and propagation conditions.

However, biologically significant behavioral changes can occur at far lower levels. The 90 dB contour will be at 55-60 km, covering an area roughly 2500 times larger than that used for calculating takes. The 70 dB contour would be at 80-90 km, an area roughly 5,000-10,000 times the area used to calculate takes.

While it is possible that distance as well as received level should be considered when predicting whether porpoises will avoid a noise source, I've observed harbor porpoises moving away from a large array at a distance of over 60 km (Bain and Williams 2006), so even though the small arrays are quieter, it is realistic that porpoises would be displaced at tens of kilometers, disrupting feeding behavior.

This sensitivity to noise is compounded by the over-inclusive division of the harbor porpoise population. Angliss and Allen (2009) noted, "In areas outside of Alaska, studies have shown that stock structure is more fine-scale than is reflected in the Alaska Stock Assessment Reports. At this time, no data are available to reflect stock structure for harbor porpoise in Alaska. However, based on comparisons with other regions, smaller stocks are likely. Should new information on harbor porpoise stocks become available, the harbor porpoise Stock Assessment Reports will be updated." That is, the stock to be affected by the survey is likely to be far smaller than currently recognized. The implication is that the population is far less able to tolerate takes than expected based on the current stock definition.

Another point of concern is that NMFS is reviewing new data on other sources of takes, but will not complete the analysis until next year (Allen and Angliss in prep.). These data are needed to assess the cumulative effects of the proposed survey and other factors that impact the population.

Finally, the density estimates for harbor porpoises may be low. The values used in the application appear to be based on observer sightings. While efforts were made to equalize data quality (Funk *et al.* 2006), it is unlikely the data are as reliable as data from dedicated surveys, and small species like harbor porpoises are easily missed.

Impact on Gray Whales

The Chukchi Sea is an important feeding habitat for gray whales. As can be seen in Figure 2, the distance offshore and water depth of the survey area is prime gray whale habitat (Rugh *et al.* 1999, Moore *et al.* 2000).

Gray whale movement is known to be affected by noise levels of 120 dB (Richardson *et al.* 1995), which is far lower than the 160 dB used in calculating takes. The 120 dB contour would occur about 23 km from the survey vessel.

The significance of the survey to the gray whale population depends in part on its true conservation status. Following decades of recovery from commercial whaling, gray whales were removed from the endangered species list in 1994, and their population continued to increase through 1997. However, the population then proceeded to decline by about one-third in less than 10 years. The most recent population count is below the number when the species was delisted (Ireland *et al.* 2009).

This raises the question of whether gray whales should be re-listed as threatened under the Endangered Species Act, since their population has a negative trend and is at a level that was considered threatened even when it was increasing.

One implication of re-listing would be a change in the Recovery Factor for calculating Potential Biological Removal. Using the value for an ESA listed species would reduce PBR to 42. Subsistence harvest in Russia alone exceeds this number. Thus additional threats, such as habitat loss due to disturbance from seismic surveys, would result in further jeopardy to the survival of the species. Feeding habitat loss due to climate change has been identified as a threat to this species (Angliss and Allen 2009), so habitat loss due to disturbance would be a threat as well. Thus it is clear that a careful evaluation of the status of this species is needed before activities that disturb gray whales are allowed.

12

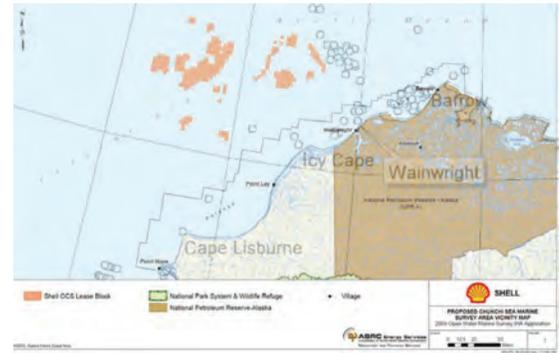


Figure 2. Autumn Gray Whale Distribution. Gray whale sightings (dark circles) are from Moore *et al.* (2000) and the survey area (pink squares) is from the Shell application (Ireland *et al.* 2009). Note the concentration of gray whales adjacent to the survey area.

Belugas

As with bowheads, it appears belugas will be present in the survey area in small numbers at the start of the proposed survey, but their numbers will increase later in the season as they migrate through the survey area. Studies have also demonstrated the sensitivity of belugas to levels of noise below 160 dB, as discussed above.

As with bowheads, increased takes due to migration should have been taken into account. The number of takes would also depend strongly on the timing of the migration (Moore *et al.* 2000, Angliss and Allen 2009) relative to the actual timing of the survey.

Summary

NMFS has acknowledged it lacks the data necessary to determine the significance of the effects of the proposed survey on harbor porpoises. It knows neither stock boundary nor stock size nor population trends. A careful review of the status of gray whales is also needed to assess the significance on them. NMFS also lacks the high quality data needed to accurately estimate effects on bowheads.

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In addition, NMFS has misinterpreted the available data, resulting in serious underestimates of takes. Systematic errors include: underestimating bowhead density with poor models, while ignoring existing data; underestimating the number of bowheads exposed by failing to consider migration; failing to consider consequences of behavioral changes caused by noise levels below 160 dB; failing to carefully consider the overlap in distribution of the species with the survey area.

Further, bowheads and belugas increase their use of the survey area in September and October. NMFS failed to consider the increases in takes if there are delays in the work resulting in its completion at the end of the period covered by the application (end of October) rather than at the time given for the best case scenario (late September).

Mitigation

A fundamental assumption in noise mitigation in general is that animals will move away from the noise source (horizontal avoidance). However, this is not a good assumption. Some species may exhibit vertical avoidance rather than horizontal avoidance (see Williams 1999). Other species may try to find shelter (e.g., rockfish Skalski *et al.* 1992, Pearson *et al.* 1992, and killer whales, personal observation). Local minima in the sound field may be found near shore, near the surface, and near the bottom. However, remaining in a sheltered location only provides temporary protection. An additional problem is that many species are sedentary, territorial, or have strong tendencies toward site fidelity (e.g., Eisenhardt *et al.* 2002, Pearson *et al.* 1992, Skalski *et al.* 1992). These species are unlikely to move away from a noise source. A related problem is that many predators are used to experiencing pain during feeding, and hence tolerate pain rather than abandon their prey (e.g., many marine mammals involved in fishery-interactions (Reeves *et al.* 1996, Norberg and Bain 1994, Yano and Dahlheim 1995, Whitehead 2003).

MMOs can be helpful. However their ability to give full attention is limited. A common work schedule where consistent effort is required is 40 minutes on, 40 minutes off (recording rather than observing), 40 minutes on, two hours off (resting), three times a day (e.g., Forney and Barlow 1998, Dahlheim and Towell 1994, Barlow and Forney 2007). Thus to have two observers on duty full time, an observation team of six would be required to cover a twelve hour day. Twelve observers would be required to cover a 24 hour period. Further, observers working shifts longer than 40 minutes cannot be expected to have the same sighting efficiency as those working in dedicated surveys, making it questionable to use sighting efficiencies from dedicated surveys to predict effectiveness of MMOs, and to use dedicated survey parameters to extrapolate density estimates from MMO data.

Even with well-rested, dedicated observers, on a ship that is frequently outfitted for marine mammal surveys, a high proportion of marine mammals will be missed.

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Factors affecting sightability include the duration of dives, duration of surface intervals, group size and synchrony, and propensity for conspicuous behavior. Forney and Barlow (1998) estimated that from 10 to 44% of cetacean groups directly on the track line were missed in ship-based surveys. The probability of detecting groups 1 km off to the side was about 1/4 that of groups directly on the track line (~20-30%). Similarly, Richardson and Thomson (2002) estimated that in aerial surveys 40% of bowheads at the surface near the trackline will be missed, even in good conditions. Since NMFS' proposed mitigation does not require the two observers employed in the Forney and Barlow (1998) study, detection rates could be as low as half those reported while the observer is still fresh. As the observer fatigues, detection rates would become even lower. That is, the potential to mitigate impact through the use of observers is far from realized with the proposed implementation.

For pinnipeds, sighting efficiency is likely to be even lower. Richardson *et al.* (1999) compared sighting rates with one versus two observers. If each observer sighted 10% of the seals present at the surface, then 9% of seals would only be sighted by the first observer, 9% would only be sighted by the second, and 1% would be sighted by both. That is, if the sighting rate were .2/hr for one observer, the predicted sighting rate for two observers would be .38/hr. This agrees well with the data, suggesting that when monitoring is carried out by one observer, 90% of seals will be missed, and with two observers, 81% of seals would be missed (not counting seals that remained submerged when the vessel was within sighting range). That is, relying on observers to see seals and shut down the airguns is likely to fail the vast majority of the time.

Another approach to estimating sighting efficiency is to assume density is constant and comparing sighting rates. With the annuli increasing in radius by 50 m, the area in successive annuli used by Richardson *et al.* (1999) will increase and hence the expected number of sightings would increase. That is, the ring from 350-400 should have 15 times as many sightings as the number of sightings within 50 m. The actual number of sightings was only about 1% of this number. Even the 51-100 ring, which should have three times as many sightings, had fewer sightings than the number within 50 m, suggesting sighting efficiency was already down by at least a factor of 3.

Even with limited sighting efficiency, industry surveys reveal that seals were sighted within the safety zone. This indicates that seals cannot be counted on to move out of the way. It appears some seals move to the surface to minimize their received level, but being at the surface makes them unable to swim rapidly away. As a result, the airgun arrays can approach them closely.

Many species are capable of diving for more than 30 minutes. Richardson and Thomson (2002) estimated that 85% of bowheads would be missed in aerial surveys because they are underwater. Even if animals are at the surface, they are likely to be missed (Forney and Barlow 1998, Wade *et al.* 2003, Cox *et al.* 2006). Groups more than 1 km away are unlikely to be seen, but survey vessels typically travel farther than this during the course of a long dive.

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Visibility can further reduce sighting efficiency. Rain, snow, fog, and glare all impair sighting efficiency. Wind (and resulting waves) also impairs the ability to sight animals, particularly small ones (Forney and Barlow 1998). Sightings with the unaided eye become nearly impossible at night (personal observation).

As acknowledged by NMFS, the effectiveness of infra-red or night vision gear in compensating for reduced visibility is limited. A number of technologies are in fact available, including light enhancement, illumination, and thermal infrared. Light enhancement is ineffective in offshore areas, because even with enhancement dark animals do not reflect enough light to be seen (personal observation). Some devices attempt to overcome this through the use of infrared lasers to illuminate the scene. However, high humidity in the marine environment results in backscatter that obscures the view (personal observation). Thermal infrared can result in successful visual detection of marine mammals at night (Perryman *et al.* 1999, Bain personal observation). However, images need to be sufficiently magnified to distinguish the animal from noise and marine debris, and there also needs to be sufficient resolution to allow animals to be recognized. Existing sensors offer limited numbers of pixels (typically 0.25 - 1% the number offered by digital cameras designed to replace film), and the necessary magnification limits the field of view. As a result, the probability of pointing the device in the right direction while animals are at the surface is small (personal observation). The probability of seeing animals at night is far lower than during the day, even with the best of night vision gear. Nevertheless, thermal infrared imaging is better than not observing at all, and is likely to be more effective with large marine mammals like bowheads than small marine mammals like porpoises.

Passive acoustic monitoring is another technique that could be applied, although it is another technique that is likely to have limited effectiveness. Even with vocally active species like sperm (Forney and Barlow 1998) and killer whales (personal observation), all individuals in groups can be silent for hours at a time. Other species are even less likely to vocalize. Further, once noisy operations begin, species may respond by becoming silent (e.g., none were heard even though many acoustic measurements were made in close proximity to marine mammals during the SHIPS seismic survey, Brocher *et al.* 1999, Calambokidis *et al.* 1998, personal observation). Nonetheless, species like blue, right and bowhead whales are frequently acoustically detected in areas where they are not sighted by vessel or shore-based observers (Širović 2006, Wade *et al.* 2006), so it would be worth using this approach.

Even if marine mammals are sighted, it is not clear that effective mitigation can result from that, as it will take time to communicate the need to shut down and carry out the steps needed to terminate sound generation.

Monitoring

The literature on effects of noise on Arctic marine mammals have produced inconsistent results. This emphasizes the importance of a monitoring program both to measure actual

effects and to better relate noise exposure to effects. Important information to gather include: individual identifications of individuals actually exposed to noise; measurement of actual received levels both near the noise sources and distant from them; and measurement of fecal stress hormones.

Identification of individuals exposed to noise will allow comparison of population dynamics of exposed and non-exposed individuals. It would also allow identification of individuals repeatedly exposed to noise, both under this IHA and other IHA's in the region.

Limiting observations to individuals near the noise source biases results, as data can be collected from exceptionally noise tolerant individuals, but not from individuals that avoid the source at a distance (Bain and Williams 2006). Estimating takes based only on noise tolerant individuals may seriously underestimate the number of individuals taken.

Noise exposure is known to cause stress reactions in captive cetaceans (Romano *et al.* 2004). Fecal sampling to monitor stress and reproduction has proven a valuable tool for conservation of North Atlantic right whales (Reeves *et al.* 2001). Adrenal hormone metabolites can be used to measure psychological stress. Other metabolites can be used to measure nutritional stress. Reproductive hormones can be used to determine reproductive status (Rolland *et al.* 2006). Combined with re-sightings of these individuals in the subsequent year, this information can be used to assess whether stress from noise exposure can lead to reproductive failure.

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Expert Panel Review of Monitoring Protocols in Applications for Incidental Harassment Authorizations Related to Oil and Gas Exploration in the Chukchi and Beaufort Seas, 2011: Statoil and ION Geophysical

Anchorage, Alaska
9 March 2011

I. BACKGROUND

Sections 101(a)(5)(A) and (D) of the Marine Mammal Protection Act (MMPA) allow for the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographic region. For activities that occur in Arctic waters and have the potential to affect the availability of a species or stock of marine mammal for subsistence uses, the monitoring plan for the proposed activity must be independently peer-reviewed. To aid the National Marine Fisheries Service (NMFS) in its review of the monitoring plans for the upcoming season, NMFS holds an annual Open Water Meeting in Anchorage, Alaska, each spring. The meetings are open to the public and provide an opportunity for applicants to share the results of monitoring programs from the previous year and present the monitoring plans for activities proposed for the upcoming open water season. The meeting also allows for input and comments from Alaska Natives, industry representatives and industry-funded scientists, government representatives, environmental organizations, and interested members of the public on the results of the previous year's monitoring programs and the proposed monitoring plans for the upcoming season.

In 2011, NMFS, working with the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), sponsored the Open Water Meeting on 7-8 March. At the time of the meeting, NMFS had received two applications for Incidental Harassment Authorizations (IHAs), one from Statoil and the other from ION Geophysical, to take marine mammals by harassment incidental to industry operations. For each of these applications, NMFS must make a determination as to whether the proposed activities will have (1) more than a negligible impact on the pertinent protected species or stock, or (2) an unmitigable adverse impact on the availability of such species or stock for subsistence hunting. NMFS also must prescribe (1) regulations establishing permissible means of taking and other means of effecting the least practicable adverse impact, and (2) monitoring and reporting requirements.

The methods most often described in monitoring plans have two specific goals. The first is to detect when mitigation thresholds have been met and appropriate responses must be instigated (e.g., monitoring that may lead to a shutdown of an activity if a marine mammal enters a relatively small "safety" zone intended to minimize the probability of injury). The second objective is to provide sufficient information about distribution and movement of animals to support a sufficiently robust post-hoc analysis of the number of animals that may have been taken incidental to, and the potential effects of, industry activities. Thus, the former type of monitoring is used to provide a degree of protection for animals from harm during operations, whereas the latter is used to estimate post-hoc just what the impact was based on number and types of takes.

According to NMFS policy guidelines, the marine mammal monitoring prescribed in the terms of either an IHA or Letter of Authorization (LOA) and generally required of action-proponents (e.g., oil and gas industry, military) whose operations may impact marine mammals and other protected species should be designed to accomplish or contribute to one or more of the following:

- a) An increase in our understanding of the likely occurrence of marine mammal species in the vicinity of the action, i.e., presence, abundance, distribution, and/or density of species.
- b) An increase in our understanding of the nature, scope, or context of the likely exposure of marine mammal species to any of the potential stressor(s) associated with the action (e.g.,

sound), through better understanding of one or more of the following: 1) the action itself and its environment (e.g., sound source characterization, propagation, and ambient noise levels); 2) the affected species (e.g., life history or dive patterns); 3) the likely co-occurrence of marine mammal species with the action (in whole or part) associated with specific adverse effects, and/or; 4) the likely biological or behavioral context of exposure to the stressor for the marine mammal (e.g., age class of exposed animals or known pupping, calving or feeding areas).

- c) An increase in our understanding of how individual marine mammals respond (behaviorally or physiologically) to the specific stressors associated with the action (in specific contexts, where possible, e.g., at what distance or received level).
- d) An increase in our understanding of how anticipated individual responses, to individual stressors or anticipated combinations of stressors, may impact either: 1) the long-term fitness and survival of an individual; or 2) the population, species, or stock (e.g., through effects on annual rates of recruitment or survival).
- e) An increase in our understanding of the effectiveness of mitigation and monitoring measures.
- f) A better understanding and record of the manner in which the authorized entity complies with the incidental take authorization.

2. PEER-REVIEW PANEL OBJECTIVES

To satisfy the peer-review requirements of section 216.108(d) of the regulations pertaining to issuance of IHAs in areas of the Alaskan Arctic, NMFS convened an expert peer-review panel (hereafter the "panel") of five scientists and one experienced Inupiat hunter, with diverse backgrounds and familiarity with marine mammal natural history and biology, research, and conservation in the Arctic regions of Alaska. A facilitator with extensive background in Arctic marine mammal science, conservation, and management issues assisted with the discussions among the panelists and between the panel and industry representatives. This was the second such panel conducted in conjunction with the Arctic Open Water Meetings to consider the previous and proposed monitoring plans; four members of the panel and the facilitator from 2010 also participated in 2011. On March 9, 2011, panel members reviewed the two IHA applications from Statoil and ION Geophysical and discussed specific recommendations (meeting minutes available upon request). The panel considered how components of monitoring plans applied to all lines of investigation identified in NMFS' policy guidelines stated above, although expert panelists were instructed to focus primarily on deriving a robust estimate of actual takes and enhancing understanding of the potential effects of industry's activities on marine mammals. Panel members did not strive for consensus on specific points; differing perspectives are indicated herein by reference to "some" and "others."

The specific guidance given to the panel was as follows:

Each IHA applicant's monitoring program should be designed to accomplish one or more of the following: document the effects of the activity (including acoustic) on marine mammals; document or estimate the actual level of take as a result of the activity (in this case, seismic or marine surveys or icebreaking); increase the knowledge of the affected species; or increase knowledge of the anticipated impacts on marine mammal populations. OPR [NMFS' Office of Protected Resources] is asking you to review the monitoring plans to ensure that the monitoring activities and methods described in the plans will enable the applicant to meet these stated goals. Specifically, OPR would like the panel to discuss the following questions with regards to each monitoring plan:

- Are the applicant's stated objectives the most useful for understanding impacts on marine mammals and otherwise accomplishing the goals stated in the paragraph above?
- Are the applicant's stated objectives able to be achieved based on the methods described in the plan?
- Are there techniques not proposed by the applicant, or modifications to the techniques proposed by the applicant, that should be considered for inclusion in the applicant's monitoring program to better accomplish the goals stated above?
- What is the best way for an applicant to present their data and results (formatting, metrics, graphics, etc.) in the required reports that are to be submitted to NMFS?

This report documents the panel's evaluation of Statoil's and ION's proposed monitoring plans for 2011 and provides recommendations for improvements that could be enacted for operations conducted within two timeframes: a) 2011; or b) in the near future, possibly with intermediate steps before complete compliance. Specific *recommendations* are numbered consecutively throughout this report.

3. RESULTS OF 2010 PEER-REVIEW PANEL RECOMMENDATIONS

The panel requested a report from staff of NMFS' Office of Protected Resources on the implementation of the recommendations from the 2010 panel. OPR reported that while the primary purpose of the review was to provide an assessment of the monitoring plans for NMFS, the 2010 panel report is publically available on the OPR website. The recommendations from the 2010 panel were discussed within OPR and the NMFS Alaska Regional Office. Additionally, OPR sent letters requesting that Statoil and Shell make specific changes to their respective monitoring plans as a result of comments by the panel. The letters from OPR included requirements for both 1) specific panel recommendations NMFS expected the companies to implement in the 2010 monitoring plans for their IHAs and 2) improvements to monitoring plans they should consider implementing in 2011 and beyond. OPR staff held conference calls with company representatives to make sure they understood the new recommendations and requirements.

OPR's letters to each company added specific requirements to the 2010 IHAs, in part resulting from panel recommendations, including additional observer training requirements, the use of high-power "big eye" binoculars, conducting observations from the highest possible position on the boat, and prioritizing observation of safety radii over acquiring detailed behavior data, among others. OPR additionally required that companies share raw data from their monitoring plans upon request. OPR also requested that the companies collect additional information pertaining to the effectiveness of the "ramp-up" mitigation procedure for airgun operations that is a current industry standard despite a lack of study as to its actual efficacy.

The panel noted and appreciated industry's efforts to pursue new monitoring technologies during operations in 2010. Specifically, ION pursued the panel's recommendation to investigate the use of thermal imaging technology for night observations but did not implement its use because their 2010 seismic program was postponed. Additionally, Statoil investigated the use of a towed passive acoustic monitoring array. Results of this feasibility test were presented and discussed at the 2011 Open Water Meeting. Statoil's tests enabled evaluations of the pros and cons of this new equipment application and provided a better understanding of whether and how this technology might substantially improve an integrated approach to marine mammal monitoring during the open water period.

The panel discussed the requisite follow-up to ensure the companies implemented the new requirements in their monitoring plans that resulted from the 2010 panel recommendations. Members of the panel expressed some concern about the lack of willingness of some companies to provide certain non-proprietary data (aerial and vessel-based marine mammal survey data; acoustic detections of marine

mammals and any marine mammal responses to sound; biological and physical oceanographic data; location and movement of equipment operating in the region; type of equipment used, including characteristics of sound intensity and frequency, sound propagation in the environment at the time of the activity, and duty cycles; and timing of the activity) upon request. OPR committed to review the 90-day reports to ensure that the new requirements (e.g., incorporating uncertainty into post-season estimates of take) had been addressed.

Building on the successes of the framework established in 2010, the panel recommended that the following actions be taken to assist NMFS in interpreting future panel recommendations and to ensure that the companies implement the prescribed recommendations:

Recommendations

- (1) Companies should be asked specifically to report what changes they made in their operations as a result of the previous years' panel recommendations. These should be highlighted in their verbal presentations at the Open Water Meeting, discussed directly with the review panel, and detailed in their 90-day reports (and final reports, if appropriate).
- (2) NMFS should follow up with the panel shortly after the draft panel report is submitted to NMFS to make sure NMFS understands the recommendations so that they can better communicate the recommendations to industry.
- (3) NMFS should follow up with industry to ensure that the new IHA requirements resulting from NMFS' decisions based on the panel's recommendations were implemented, both in the field and in the reports.

4. GENERAL RECOMMENDATIONS AND COMMENTS

Some of the 2010 panel recommendations were more overarching and/or long-term than a single company's monitoring plan or activities. These recommendations encouraged NMFS and all stakeholders to take a more comprehensive view of increasing development in the Arctic, in addition to the narrow, single operation approach that historically has been applied. Panel members encouraged the agency to incorporate some of these more programmatic recommendations regarding consideration of the concept of acoustic "habitat" and aggregate/cumulative effects of multiple types of human activities within new NEPA compliance assessments being developed for Arctic exploration and production activities (see recommendation 12.ii of this report). Within this process, NMFS should recognize the critical importance of the acoustic habitat for basic life functions in marine mammals and other marine life and establish management processes to protect not only individual animals but the overall acoustic habitat.

Over the course of the panel review, the panel frequently touched on general recommendations and comments that had previously been raised in the 2010 panel review. Section 3.0 from the 2010 meeting is incorporated here by reference (see Appendix A for a summary of the recommendations from the 2010 panel), with updates as discussed below.

4.1 ACOUSTIC EFFECTS OF OIL AND GAS EXPLORATION – ASSESSMENT AND MITIGATION

As identified in the 2010 panel report, the potential environmental impacts of noises produced by exploration and production activities include both small-scale, short-term effects (i.e., acute), and large-scale, long-term influences (i.e., chronic). Acute effects from single noise sources (e.g., seismic airgun array, pile driving) are presently assessed by acoustic monitoring and post-processing these data to estimate sound exposure levels at nearby animals. Acute cumulative effects on animals as a result of multiple noise sources from simultaneous activities are not considered, and neither are the potential chronic influences from multiple noise sources. For large whales and some pinnipeds, such as the

bowhead whale, bearded seal, and walrus, which produce low-frequency sounds (< 1000Hz) for communication, masking of communication sounds as a result of cumulative noises can result in the loss of communication opportunities (Clark et al. 2009). There is growing evidence that under chronic noise conditions the impacts of acoustic masking could have biological consequences. Furthermore, as noted by the 2010 panel, sufficient evidence exists to conclude that factors of sound exposure other than simply the received level are key determinants of potential impact, particularly regarding behavioral response probability. The current panel reiterates these broader recommendations for NMFS to consider and integrate into decision-making in conservation management on a more programmatic basis. This concern is especially pertinent because migrating bowhead whales are highly sensitive to low levels of anthropogenic sounds (IWC 2007, pg. 233). Additionally, and in some cases related to these overarching conclusions, members of the panel made recommendations resulting from specific observations regarding acoustic effects.

First, all acoustic sources of operations should be included both from a mitigation and a monitoring perspective. As mentioned above, most of these assessments are focused on acute, high-power sources such as seismic airgun arrays. While these are clearly important, often lost in these assessments are sounds that may have lower total instantaneous power output, but may operate more continuously or over broader areas (e.g., service or supply vessels), or may occur at somewhat higher frequencies but still within audible range of most species and at relatively high output power (e.g., some sub-bottom profilers used in shallow hazard surveys). These assessments should consider the differential hearing abilities of differing marine mammal species (see Southall et al., 2007), and the physics governing underwater sound production and propagation. Furthermore, under present acoustic impact guidelines, seismic airgun signals are categorized as impulses, even for ranges at which a significant portion of the original acoustic impulse energy is converted into broadband reverberation and/or frequency dispersive components with biologically salient features. Thus, seismic airgun signals should not be treated as truly impulsive when received at ranges where sound propagation is known to remove the impulsive nature of these signals. Over very short ranges where potential hearing loss (temporary or permanent) can occur, airgun impulses retain their impulsive features and should be considered as impulses. As distance from the seismic source increases, and the area over which behavioral impacts could occur increases, the impulsiveness of the signal is no longer its dominant acoustic feature and the signal should no longer be considered or regulated as an impulse.

Second, NMFS should provide companies with explicit information about what acoustic aspects of their activities need to be detailed in their IHAs and incorporated into take estimates. For example, this could be accomplished by recommending certain combinations of frequencies, propagating signal types and source levels that should be thoroughly addressed in the IHAs, and some measures of the spatial and temporal scales over which the activities extend.

Third, the probability of behavioral impact from specific activities should be assessed based on the best available science that is most appropriate and similar to the condition of exposure that will occur. The panel specifically noted large differences in the existing literature about the response probability for migrating bowhead whales relative to feeding/socializing individuals (see Southall et al., 2007, for a discussion). Migrating bowhead whales respond to anthropogenic sounds at much greater distances and at much lower received levels than feeding bowhead whales. Thus the behavioral context appears in this case to be a key driver of response probability, rather than merely the loudness of the received sound, which is the common metric by which these impacts have previously been regulated. Consequently, the behavioral state of animals must be considered in assessing potential impacts on animals at different times of the year or in different habitats; this might require modification to existing marine mammal observer protocols so that the ability to detect marine mammals is not compromised by the need to determine the animals' behavioral state. Where significant uncertainty exists, such as when it is difficult to ascertain the whale's behavior, a precautionary means of predicting response should be applied.

Recommendations

- (4) All significant acoustic sources of operations should be included both from a mitigation and a monitoring perspective.
- (5) Assessments of sound sources should consider the differential hearing abilities of differing marine mammal species (see Southall et al., 2007) and the physics governing underwater sound production.
- (6) NMFS should provide companies with explicit information about what acoustic aspects of their activities need to be detailed in their IHA applications and incorporated into take estimates.
- (7) The probability of behavioral impact from specific activities should be assessed based on the best available science that is most appropriate and similar to the condition of exposure that will occur. Where significant uncertainty exists, such as when it is difficult to ascertain the whale's behavior, a precautionary means (i.e., the behavioral state when whales are most sensitive to anthropogenic sounds) of predicting response should be applied.
- (8) NMFS should routinely require that the authorized entity report estimates of the spatio-temporal distributions of acoustic levels. Some panel members recommended that this reporting explicitly include acoustic levels at least as low as the 120 dB level because evidence exists to suggest that this received level has caused bowhead whales to deflect, or be entirely excluded from, an area (Brewer et al., 1993; LGL Ltd. and Greeneridge Sciences Inc., 1987; Davies, 1997; and Hall et al., 1994). Others thought that the 120 dB level should not be explicitly referenced due to the inherent complexity of the system, as marine mammal reactions to noise are likely a function of multiple factors.

4.2 AERIAL SURVEYS

Panel members spent minimal time discussing aerial surveys because neither proposed 2011 monitoring plan incorporated aerial surveys. Aerial surveys remain a useful tool for conducting far-field monitoring in some conditions, and the points made in the previous report remain relevant. Section 3.2 from the previous report is incorporated by reference (see Appendix A for a summary of recommendations from the 2010 panel).

4.3 MARINE MAMMAL OBSERVERS

Panel members specifically highlighted a few of the issues regarding marine mammal observers identified in 2010 (summarized in Appendix A), namely, the importance of having observers that are independent from industry, and the need for a tool to assess the observers' abilities to identify species. There is also a need for an independent debrief of observers to identify problems from the previous monitoring efforts and to recommend improvements for future efforts.

Significant concerns remain that the observers for the oil and gas industry are not independent of the industry, because the observers are contracted, trained, deployed, and debriefed by individuals working directly for the industry, and the observer data is transmitted, quality controlled, analyzed, released, and archived by the industry. This model was rejected long ago for the commercial fishing industry: at a minimum, when an observer program is required for a commercial fishery, the federal government trains and debriefs the observers, and conducts the quality control, analysis, release, and archival of the data.

The panel also identified that no assessment tool exists to determine whether marine mammal observers (MMOs) are correctly identifying sightings to species. It is not clear whether observers are required to demonstrate their ability to identify Arctic marine mammals before they begin observing. At the least,

observers should pass an identification test, using material that is different than what was used during training, before beginning stints as Arctic MMOs.

The 2010 panel recommended that MMOs should provide more details about observed characteristics of marine mammals that were not identified to species. For example, if an unknown mysticete was seen, it should be noted whether it had a dorsal fin. If only a blow was observed, it should be recorded as only a blow. MMOs may have recorded those details, as required in the 2010 IHAs, but those details are not included in the 90-day reports. They should be included in the final reports.

Recommendations

- (9) NMFS should investigate funding and implementing an independent observer program to replace the current system of vessel-based marine mammal observers for the oil and gas industry.
- (10) NMFS should require that MMOs pass an Arctic marine mammal identification test, with material that is different than what was used in training, before serving on an industry vessel.
- (11) NMFS should require that MMOs record additional details about unidentified marine mammal sightings, such as "blow only", mysticete with (or without) a dorsal fin, "seal splash", etc. That information should also be included in 90-day and final reports.

4.4 VISUAL NEAR-FIELD MONITORING

Section 3.4 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.5 VISUAL FAR-FIELD MONITORING

Section 3.5 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.6 BASELINE BIOLOGICAL AND ENVIRONMENTAL INFORMATION

Section 3.6 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.7 COMPREHENSIVE ECOSYSTEM ASSESSMENTS AND CUMULATIVE IMPACTS

The 2010 panel report included a section regarding the need for a more robust and comprehensive means of assessing the collective or cumulative impact of many of the varied human activities that contribute noise into the Arctic environment (see Section 4.1 above). The essence of those observations was that for many species, sounds generated by human activities overlap those used by the marine mammals, and the potential impacts from these human activities should be determined not by each activity in isolation, but rather by the cumulative effects from the suite of human activities in relation to the biological and environmental events. The 2010 panel suggested, and the 2011 panel reiterates that, in addition to the mitigation and monitoring of single activities, as occurs with IHA or LOA applications, NMFS should develop an overarching means of assessing and requiring steps to minimize the collective impacts of development activities on marine ecosystems, including marine acoustic habitats. This will require a fundamentally different mode of assessment than has previously been applied under federal law; the panel encourages NMFS to strongly consider how this may be accomplished within the ongoing programmatic EIS for Arctic oil and gas exploration and production. Cumulative impacts could and should be assessed in IHAs using risk assessment methodology.

In addition to the overarching recommendation for a more holistic and biologically relevant means of assessing the overall footprint (acoustic and otherwise) of human development in the Arctic, the 2010 panel made a number of specific recommendations about comprehensive ecosystem assessment and cumulative impacts (Appendix A). These are presented in similar form here, with some modifications derived in the 2011 panel review process.

Recommendations

- (12) NMFS should develop a framework for assessing, and requiring steps to minimize, the collective impacts of human activities on marine ecosystems, including acoustic habitats. This can be addressed two ways:
 - i. NMFS should require in IHAs that cumulative impacts assessments be conducted.
 - ii. In the pending Arctic EIS for oil and gas exploration, NMFS should address the issues and incorporate the recommendations identified in the 2010 and 2011 panel reports. The following ongoing issues are particularly important:
 - a. Evaluating monitoring techniques and the limitations thereof;
 - b. Requiring improvements in both near-field and far-field monitoring techniques;
 - c. Improving techniques for estimating the number of takes when companies or organizations request an IHA or LOA, and improving methods for estimating the number of marine mammals actually taken (or exposed) during operations;
 - d. Assessing cumulative impacts and proposing thresholds for limiting the total amount of human activity in the Alaskan Arctic to protect marine mammals, their habitat, and the availability of marine mammals to subsistence hunters.
- (13) Data analysis and integration:
 - i. To better assess impacts to marine mammals, data analysis should be separated into periods when a seismic airgun array (or a single mitigation airgun) is operating and when it is not. Final and comprehensive reports to NMFS should summarize and plot:
 - a. Data for periods when a seismic array is active and when it is not;
 - b. The respective predicted received sound conditions over fairly large areas (tens of km) around operations.
 - ii. To allow visualization and interpretation of the complex field of anthropogenic activities and distributions and movements of marine mammals, the final and comprehensive reports required by the IHA should provide all spatial data on figures that depict the locations of the principal sound sources. This could be represented by a diagram in which all MMO sightings (vessel-based and aerial) and acoustic detections are plotted relative to their distance and bearing from a specific sound source. Alternatively, it could be depicted in a map of the region, showing the operation area, tracklines of vessels and aircraft (if applicable), MMO sightings (vessel-based and aerial), and acoustic detections. To facilitate understanding of both the spatial and temporal aspects of the activity and marine mammal responses, these figures would ideally be animated, showing industry activities and sightings or acoustic detections changing through time. Whenever ancillary biological data (e.g., tagging, acoustic, broad-scale aerial survey) are available that are coincident in space and time with the activity, they should be included in these figures.
 - iii. Advances in integrating data from multiple platforms through the use of standardized data formats are needed to increase the statistical power to assess potential effects.

Therefore, industry should examine this issue and jointly propose one or several data integration methods to NMFS at the Open Water Meeting in 2012.

- iv. To help evaluate the effectiveness of MMOs, reports should include sightability curves (detection functions) for distance-based analyses.
- v. To better understand the potential effects of oil and gas activities on marine mammals and to facilitate integration among companies and other researchers, the following information should be obtained and provided electronically: the location and time of each aerial or vessel-based sighting or acoustic detection; position of the sighting or acoustic detection relative to ongoing operations (i.e., distance from sightings to seismic operation, drilling ship, support ship, etc.), if known; the nature of activities at the time (e.g., seismic on/off); any identifiable marine mammal behavioral response (sighting data should be collected in a manner that will not detract from the MMO's ability to detect marine mammals); and any adjustments made to operating procedures. These data should be presented in final and comprehensive reports, if practicable.
- vi. Prior to the 2012 Open Water Meeting companies should discuss the most practical and constructive means of making their marine mammal and environmental data (e.g., aerial and vessel-based marine mammal survey data, acoustic detections of marine mammals and any responses to sound, biological and physical oceanographic data) and other information about their activities (location and movement of equipment operating in the region; type of equipment used, including characteristics of sound intensity and frequency, sound propagation in the environment at the time of the activity, and duty cycles; and timing of the activity) available to the public.
- vii. During the 2012 Open Water Meeting, companies should propose an approach, method, or organization (e.g., AOOS, NSSI, NSB, NMFS, etc.) that could help accomplish this data-sharing task.

4.8 DUPLICATION OF SEISMIC SURVEY EFFORT

Section 3.8 from the previous report is incorporated by reference (see Appendix A for a summary of the recommendations from the 2010 panel).

4.9 IMPROVING TAKE ESTIMATES AND STATISTICAL INFERENCE INTO EFFECTS OF THE ACTIVITY

Estimating the number of individuals of each species that could potentially be taken incidental to an activity is critically important for NMFS to consider in their determination of whether the activity is likely to have no more than a negligible impact on those species. In addition, estimating the number of individuals of each species that actually were taken incidental to a permitted activity is critically important for NMFS to consider when evaluating whether the monitoring and mitigation measures were effective. However, panel members continue to have concerns that take estimates are not inferred using the best available data; neglect to incorporate existing knowledge on the animal movement (i.e., migration or other movements), which, therefore, tends to negatively bias take estimates; do not incorporate all potential disturbances associated with an activity; and fail to incorporate reliable estimates of uncertainty. Estimates of uncertainty in take estimates are particularly important, because the use of point estimates alone implies a level of certainty that does not exist.

In addition, hypothesis tests conducted on data acquired during operations, which are used to identify whether an activity affected marine mammals, usually are not presented with relevant information on the

power of the tests. The ability to evaluate the reliability of a hypothesis test is low without an estimate of the associated power.

Recommendations

- (14) Reported results from all hypothesis tests should include estimates of the associated statistical power.
- (15) NMFS should continue to assess and apply the evolving best available science in estimating the potential effects of acoustic exposure on marine mammals and other protected species. NMFS and others should expect that this would result in evolving regulatory criteria as our understanding of the underlying complex issues evolves.
- (16) In the meantime, companies should:
 - i. Provide in their reports a clear and complete explanation of methods used to estimate takes. The methods should be transparent and repeatable, and should include all necessary information on species or stock, time period, spatial extent, and other relevant parameters (e.g., whether the data were collected during times when a seismic array was active), including relevant contextual factors such as multiple simultaneous activities.
 - ii. Estimate and report uncertainty in all take estimates. Uncertainty could be expressed by the presentation of confidence limits, a minimum-maximum, posterior probability distribution, etc.; the exact approach would be selected based on the sampling method and data available.
 - iii. Include all potential sources of disturbance (e.g., seismic arrays, sub-bottom profilers, all ships, etc.) in take estimates.
 - iv. Use the best available information to compute estimated takes.
 - a. If multiple sources of reputable information are available, it is generally better to use the more recent information, even if it is not from a peer-reviewed publication, as long as standard scientific practices of data quality control and analysis are followed.
 - b. If multiple sources of concurrent, relevant information result in considerably different take estimates, both sources should be cited and both take estimates should be presented.
 - c. Differences in the species/stock, time period, spatial extent, and other relevant parameters should be investigated to determine how they might bias the take estimates for a specific activity.

4.10 IMPROVING THE PEER-REVIEW PROCESS

There were various suggestions for improving the peer-review process. When monitoring plans were first peer-reviewed in the late 1990s, the process involved more of a dialog about how to modify monitoring plans to meet specific needs identified by researchers or the subsistence community. This approach allowed the industry to participate directly in recommending novel methods for meeting scientific goals that, in some cases, proved very successful. Some members of the panel thought it would be helpful to extend the peer-review panel process to allow more time for an interactive discussion of the objectives, methodologies, technologies, and practical limitations inherent in monitoring plans with the company representatives and consultants.

The panel also asked each company's representatives if they had recommendations for improving the meeting. Statoil suggested delaying the panel meeting by one day to provide the companies time to

prepare additional materials, if necessary, based on comments received during the public meetings. This is in contrast to some suggestions made at the Open Water Meeting to schedule the panel's meetings with industry prior to the public meetings. Statoil also suggested that it might be helpful to hold a poster session, during which each activity could be displayed and people could ask questions.

Recommendations

- (17) The 2011 public Open Water Meeting was 2 days long. This was sufficient time for the companies to present a brief overview of the previous year's activities and the upcoming season's planned activities, and for the companies and the regulatory agencies to receive stakeholder input.
- (18) During the 2012 Open Water Meeting, additional time should be devoted to presentations and discussions of the insights into the impacts (or lack thereof) of exploration and production activities on marine mammals and the spatiotemporal distribution, density, and movements of marine mammals in the Arctic that have resulted from the cumulative body of research that industry has conducted in the Beaufort and Chukchi Seas from 2006 to the present, or since ~2000 for monitoring activities at Northstar production island in the Beaufort Sea.
- (19) The panel meeting should accommodate more time for discussion with the company representatives.
- (20) NMFS and the panel should provide key questions to the companies before meeting with the panel in future years. This will be particularly helpful if the panel has technical questions about the monitoring plans that are best answered by specific technical staff who might not have otherwise been present at the panel meeting.
- (21) NMFS should provide explicit guidelines to the companies regarding what details should be included in the written monitoring plans and presented to the public during the Open Water Meeting.
- (22) NMFS should consider implementing a requirement to have IHA applications submitted by November 1, thereby allowing review of plans prior to March. This would allow both NMFS and industry more time to review and adjust plans prior to the scheduled start of activities.
- (23) NMFS should encourage companies to present an overview of activities planned further than one year into the future, if known.
- (24) NMFS should compile and present a summary table detailing both the authorized and actual estimated takes for the previous year, and the proposed takes for the upcoming season. NMFS should explain how these take estimates relate to "small numbers" of individuals being affected by the permitted or proposed activities.
- (25) NMFS should develop a specific template that the panel would use to assess specific questions about the efficacy and design of monitoring programs for applications for the upcoming open water season. The panel should be directed to review and complete these assessments immediately following the panel meeting and provide those to NMFS so that relatively quick decisions may be made in this regard. The panel should then provide a separate review and recommendations on the overarching/broader issues, along the lines of many of those given here, within six weeks of the Open Water Meeting.

5. COMMENTS AND RECOMMENDATIONS ON SPECIFIC APPLICATIONS

5.1 STATOIL

5.1.1 Are the applicant's stated objectives the most useful for understanding impacts on marine mammals and otherwise accomplishing the goals stated in the paragraph above?

See section 5.1.2, below.

5.1.2 Are the applicant's stated objectives able to be achieved based on the methods described in the plan?

The panelists considered whether the objectives of the monitoring program were "useful" (question in section 5.1.1, above), and simultaneously discussed whether they could be achieved based on the methods described.

In general, the panel thought that the objectives were useful for understanding the impacts on marine mammals. However, there were no objectives focused on understanding how marine mammals would be impacted beyond the line of sight of vessel-based marine mammal observers and beyond the distance at which acoustic recorders can monitor. The panel thought that it is reasonable to add these far-field issues to the objectives and that the proposed monitoring plan would not meet these objectives. The panel also noted that several of the other acoustic sources (in addition to the small airgun array) used in the shallow hazard survey are relatively powerful and operate in the acoustic band of many if not most marine mammals; members of the panel particularly noted the sub-bottom profiler as a concern. To date, NMFS has not required the companies to include these types of sources in mitigation or monitoring plans; thus Statoil did not predict takes nor will they use the effective mitigation zones that incorporate these other acoustic sources during operations. While they are complying with the regulations in this regard, the panel notes that the objectives for mitigation and monitoring are incomplete without considering all elements of an activity with the potential to disturb or harm marine mammals.

Nevertheless, for the stated objectives, the panel generally thought that the specified monitoring plan would be generally effective.

Objective: Provide the basis for real-time mitigation, if necessary, as required by the various permits that Statoil receives. Panel members generally agreed that this objective could be achieved within the 180/190 dB "injury" zone, except during inclement weather or darkness. During those times, MMOs would unlikely be able to observe the entire safety zones.

Objective: Provide information needed to estimate the number of "takes" of marine mammals by harassment, which must be reported to NMFS and USFWS. The panel generally agreed that this objective could be achieved within the 180/190dB zone, with the concern about effective monitoring during darkness or inclement weather noted above, but that there was no effective way to estimate takes beyond the area that could be effectively seen from the vessel. Thus, it was not likely that Statoil would be able to collect data to reliably estimate the number of marine mammals that were actually "taken" by harassment.

Objective: Provide data on the occurrence, distribution, and activities of marine mammals in the areas where the survey program is conducted. The panel generally agreed that this objective could be partially achieved, but only within visual sighting distance of the observers on the vessels, which might not be representative of the occurrence, distribution and activities of all animals that could potentially be affected by the activity.

Objective: Provide information to compare the distances, distributions, behavior, and movements of marine mammals relative to the survey vessel at times with and without airgun activity. The panel

generally agreed that this objective could be partially achieved, but only within visual sighting distance of the observers on the vessels. Broad-scale movements of marine mammals should be investigated within the context of both the Statoil survey vessel and other activities in the area. Because the number of sightings from the seismic survey boat will be small, other sources of information (including passive acoustics and aerial surveys) should be pooled to increase the amount of information that can be incorporated in the analysis.

Objective: Provide a communication channel to coastal communities including Inupiat whalers and other subsistence users. This objective can be achieved provided there is always an Inupiat communicator on the vessel. The vessel-based monitoring program may help to minimize impacts on the subsistence harvest, particularly during crew transfers at villages (e.g., Wainwright) by obtaining updated and accurate information on the status and location of subsistence hunting activities in the area and taking necessary actions to minimize disturbance, but the monitoring plan does not address impacts on subsistence at other times.

Objective: Passive acoustic monitoring. Panel members agreed that the passive acoustic monitoring objectives are appropriate for assessing sound source verification for some of the sound sources on the seismic vessel. However, concerns remained because not all sound sources would be evaluated and the effects of the activities' sounds on animals in the far-field would not be evaluated.

5.1.3 Are there techniques not proposed by the applicant, or modifications to the techniques proposed by the applicant, that should be considered for inclusion in the applicant's monitoring program to better accomplish the goals stated above?

The panel recognized that the current monitoring plan does not propose to address any far-field impacts of the seismic operation. In order to improve the monitoring plan so it would address far-field monitoring, the following should be implemented:

- Use the cluster array to localize whale calls and evaluate the effects of sound on calling animal distribution.
- Conduct sound source verification for the sub-bottom profilers.
- Under specific conditions, conduct aerial surveys to evaluate distributions of whales in the vicinity of exploration and production activities. The industry has expressed concerns related to the safety of manned aerial surveys. If manned surveys are not feasible, other methods for far-field monitoring (e.g., unmanned systems or scout vessels) need to be investigated and, upon approval by NMFS, implemented.
- Consider other new technologies (i.e., underwater vehicles, satellite monitoring, etc.) to assess far-field monitoring.

5.1.4 What is the best way for an applicant to present their data and results (formatting, metrics, graphics, etc.) in the required reports that are to be submitted to NMFS?

Review panel members generally re-iterated the recommendations made in last year's panel report, in addition to those listed in section 4.7 above. Furthermore,

- The report should clearly compare authorized takes to the level of actual estimated takes.
- Sightability curves (detection functions) for MMOs should be provided.
- As a starting point for integrating different data sources, Statoil should present their 2010 and 2011 data by plotting acoustic detections from bottom-mounted hydrophone and visual detections from MMOs on a single map.

5.2 ION GEOPHYSICAL

5.2.1 Are the applicant's stated objectives the most useful for understanding impacts on marine mammals and otherwise accomplishing the goals stated in the paragraph above?

See section 5.2.2, below.

5.2.2 Are the applicant's stated objectives able to be achieved based on the methods described in the plan?

The panelists considered whether the objectives of the monitoring program were "useful" (question from section 5.2.1, above) and simultaneously discussed whether they could be achieved based on the methods described. In general, the panel thought that the objectives were useful for understanding the impacts on marine mammals. However, one major shortcoming was there were no objectives focused on estimating actual takes or understanding how marine mammals would be impacted beyond the immediate line of sight of vessel-based marine mammal observers. The panel recognizes the trade-off that ION is attempting to make, working during a time when fewer whales are likely to be present, but the compromise is that there are likely to be so few daylight hours (particularly by the end of the survey) that none of the monitoring objectives will be achievable.

Objective: Provide the basis for real-time mitigation, if necessary, as required by the various permits that ION receives. Panel members generally agreed that this objective could not be achieved due to extended periods of darkness and inclement weather, and presence of sea ice, during the time of year (October to December) in which the proposed activity would occur. The panel discussed whether previous failures of thermal imaging technologies to detect marine mammals, especially cetaceans, should preclude ION's plan to use thermal imaging technologies during the autumn and winter in the Beaufort and Chukchi Seas. Some panel members commented that the winter environment might be very different, and that thermal imaging technologies had been helpful during spring ice seal research in the Bering Sea when seals were on the ice. There was concern expressed about whether thermal imaging systems are able to detect bowheads. The conclusion was that thermal imaging technologies should still be tested by ION during their proposed activities.

Objective: Provide information needed to estimate the number of "takes" of marine mammals by harassment, which must be reported to NMFS and USFWS. Panel members generally agreed that this objective could not be achieved due to multiple factors (e.g., extended periods of darkness, presence of sea ice, inclement weather) that are likely to occur during the proposed time period of the activity.

Objective: Provide data on the occurrence, distribution, and activities of marine mammals in the areas where the survey program is conducted. Panel members generally agreed that this objective could not be achieved under true "baseline," or undisturbed, conditions; therefore, the resulting data would provide little information for estimating actual takes or understanding potential effects of the activity on marine mammals. Even during the 40- to 60-second periods each hour during which ION plans to not fire the airguns, marine mammals in the vicinity of the operations could potentially be affected by the presence of the vessels and the previous operation of the airgun array. At best, these data will provide information on the occurrence, distribution, and activities of marine mammals that were detected by MMOs during the operations; extrapolation to all animals in the area of operations will be extremely unreliable and inappropriate.

Objective: Provide information to compare the distances, distributions, behavior, and movements of marine mammals relative to the survey vessel at times with and without airgun activity. Panel members generally agreed that this objective could not be achieved because the 40- to 60-second periods each hour

during which ION plans to not fire the airguns is too short to consider representative of baseline conditions. However, the panel noted that the acoustic information about the activity that could be gained over the course of the survey when the airguns were shut off would be valuable for post-analysis of this activity and for evaluating future activities. The panel recommended the airguns be turned off for two shots (i.e., 60 seconds) to provide sufficient time to record the background noise associated with the vessels.

5.2.3 Are there techniques not proposed by the applicant, or modifications to the techniques proposed by the applicant, that should be considered for inclusion in the applicant's monitoring program to better accomplish the goals stated above?

ION should deploy overwintering acoustic recorders within their survey area during their eastward transit across the Alaskan Beaufort to the Canadian Beaufort Sea early in the summer. The recorders would monitor sounds during the summer, the seismic shoot, and over the winter. ION should contract someone to return in 2012 to retrieve the instruments and analyze the data. These acoustic data would provide some true baseline information to compare the occurrence, distribution, and behavior of marine mammals at times when ION's activities are occurring and when they are absent. To accomplish this, ION should present a plan for an acoustic monitoring program to an independent expert panel for review. The plan should consider the best placement of the instruments relative to ION's proposed activities, the expected distribution and gradients in marine mammal distribution, and other existing overwintering recorders. There are relatively few data on the distribution and relative abundance of marine mammals in the Beaufort Sea during ION's planned seismic survey. Additional information is needed. Therefore, some panel members thought that ION should conduct aerial surveys in the proposed survey area in October, when there is sufficient daylight to effectively conduct a visual survey, and when belugas, seals, polar bears, and bowheads will likely still be in the area.

ION should also consider changing the survey design to minimize the likelihood of affecting the autumn subsistence whaling and hunting activities. If the western transect lines are critically important to survey, ION should survey them during the open water period, which is prior to the autumn whaling and hunting season and is when more is known about the occurrence, distribution, density, and behavior of marine mammals. It is also when available mitigation methods are most likely to be successful.

If ION does conduct their surveys during the proposed time period, they should establish a communication plan with the hunters. The proposed time period is after the other companies plan to complete their activities, and, therefore, the communication centers are not scheduled to continue operating. ION should wait until the bowhead hunt ends (approximately 20 October) before beginning to survey in the western region of their survey area.

5.2.4 What is the best way for an applicant to present their data and results (formatting, metrics, graphics, etc.) in the required reports that are to be submitted to NMFS?

Panel members generally re-iterated the recommendations made in last years' panel report and listed in section 4.7 above. In addition,

- The report should clearly compare authorized takes to the level of actual estimated takes.
- Sightability curves (detection functions) for MMOs should be provided.

6. ACKNOWLEDGEMENTS

Panel members wish to acknowledge and thank Mr. George Noongwook of St. Lawrence Island and Johnny Aiken of Barrow for the information and insights they brought to the panel discussions. Panel members also wish to thank Dr. Robyn Angliss for facilitating the panel's discussion and Ms. Sheyna Wisdom for taking minutes of the meeting.

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8. PANEL MEMBERS

The members of the review panel were:

- | | |
|---------------------------|--|
| Harry Brower | Alaska Eskimo Whaling Commission |
| Christopher W. Clark, PhD | Cornell University, Bioacoustics Research Program |
| Megan Ferguson, PhD | National Marine Fisheries Service, National Marine Mammal Laboratory |
| Jason Gedamke, PhD | National Marine Fisheries Service, Office of Science and Technology |
| Brandon Southall, PhD | Southall Environmental Associates, Inc |
| Robert Suydam, PhD | North Slope Borough, Department of Wildlife Management |

Appendix A

Summary of General Recommendations from the 2010 Peer-review Panel Report

1.0 Acoustic effects of oil and gas exploration – assessment and mitigation

- 1.1 NMFS should begin a transition away from using a single metric of acoustic exposure (i.e., sound pressure level) to estimate the potential effects of anthropogenic sound on marine living resources.
- 1.2 NMFS should be constantly striving toward a more comprehensive ecosystem-based approach in predicting the nature and severity of environmental risks from industrial activities, including oil and gas development.
 - 1.2.1 Recognizing that NMFS may not be able to implement such an approach for mitigation purposes on a real-time basis, for real-time mitigation NMFS may have to continue relying on simple measures that can be readily applied in the field.
 - 1.2.2 These simple measures should be based on the more comprehensive ecosystem assessments and they should be precautionary to compensate for remaining uncertainty in potential effects.
 - 1.2.3 Furthermore, NMFS should tailor those simple measures to the various activities to be conducted (e.g., seismic studies versus exploratory drilling), the environments in which they will be conducted (e.g., deep pelagic versus shallow coastal), and the relevant biological circumstances (e.g., species present, migratory versus reproductive seasons).

2.0 Aerial Surveys

- 2.1 Aerial surveys should not be categorically excluded as a research and monitoring tool in the Chukchi Sea.
- 2.2 If aerial surveys are not used, then additional monitoring tools (e.g., passive acoustic systems, unmanned aircraft systems) must be further developed, field tested, and implemented to provide the type of information gained from aerial surveys (e.g., species-specific estimates of the number of individuals taken by a particular activity).
- 2.3 Monitoring for the purpose of detecting mitigation thresholds (e.g., identifying aggregations or mothers with calves within safety radii) requires that the aircraft be able to break away from pre-determined transects to circle sighted animals and confirm such information as species, number of animals, and group composition.
- 2.4 Those responsible for monitoring with the intent of detecting the effects of certain activities (e.g., seismic surveys, exploratory drilling) should adjust their survey design (e.g., stratify levels of effort) to meet the monitoring goals, with anticipated level of survey effort determined by pre-survey analyses of statistical power for detecting responses.
- 2.5 To maximize the value of aerial surveys for mitigation, survey data should be entered into a computer on board the aircraft in a way that enables immediate geospatial analysis by the survey team and evaluation by NMFS.

3.0 Marine Mammal Observers

- 3.1 Observers should be trained using visual aids (e.g., videos, photos), to help them identify the species that they are likely to encounter in the conditions under which the animals will likely be seen.
 - 3.2 Observers should understand the importance of classifying marine mammals as "unknown" or "unidentified" if they cannot identify the animals to species with confidence. In those cases, they should note any information that might aid in the identification of the marine mammal sighted. For example, for an unidentified mysticete whale, the observers should record whether the animal had a dorsal fin.
 - 3.3 Observers should attempt to maximize the time spent looking at the water and guarding the safety radii. They should avoid the tendency to spend too much time evaluating animal behavior or entering data on forms, both of which detract from their primary purpose of monitoring the safety zone.
 - 3.4 "Big eye" binoculars (e.g., 25 x 150 power) should be used from high perches on large, stable platforms. They are most useful for monitoring impact zones that extend beyond the effective line of sight. With two or three observers on watch, the use of big eyes should be paired with searching by naked eye, the latter allowing visual coverage of nearby areas to detect marine mammals. When a single observer is on duty, the observer should follow a regular schedule of shifting between searching by naked-eye, low-power binoculars, and big-eye binoculars based on the activity, the environmental conditions, and the marine mammals of concern.
 - 3.5 Observers should use the best possible positions for observing (e.g., outside and as high on the vessel as possible), taking into account weather and other working conditions.
 - 3.6 Sightings should be entered and archived in a way that enables immediate geospatial depiction to facilitate operational awareness and analysis of risks to marine mammals. Real-time monitoring is especially important in areas of seasonal migration or influx of marine mammals. Various software packages for real-time data entry, mapping, and analysis are available for this purpose.
 - 3.7 Observer teams should include Alaska Natives and all observers should be trained together. Whenever possible, new observers should be paired with experienced observers to avoid situations where lack of experience impairs the quality of observations.
 - 3.8 Following the model used to monitor commercial fisheries, observers should be managed by an independent organization that trains and assigns them to observe various operations. Training and on-site performance should be evaluated regularly. At the end of every assignment, the organization should debrief the observers, collect their data, conduct basic analyses with the data, and prepare the data and results for dissemination to interested parties.
 - 3.9 NMFS should provide instructions regarding the estimation of the number of takes during the course of an activity (e.g., seismic survey). The guidance should be sufficiently specific to ensure that take estimates are accurate and include realistic estimates of precision and bias.
- 4.0 Visual Near-field Monitoring**
- 4.1 NMFS should require efficacy testing of night-vision binoculars, forward-looking infrared devices, and other such instruments to improve near-field monitoring under Arctic conditions.
 - 4.2 NMFS should encourage the industry to consider the use of seismic streamers (passive acoustic technology) to collect bioacoustic information. At present, this kind of monitoring

has not been successfully used for determining the exact locations of animals relative to safety zones, but further development of passive acoustic technology may facilitate such uses in the foreseeable future.

- 4.3 Industry should avoid the use of "sampling" the visual near-field area periodically and then extrapolating to the full survey period. This approach has severe shortcomings and could lead to biased results and conclusions regarding the effects of industry activities.
- 4.4 To help evaluate the utility of ramp-up procedures, NMFS should require observers to record, analyze, and report their observations during any ramp-up period. NMFS also should support specific studies using multiple types of monitoring (visual, acoustic, tagging) to evaluate how marine mammals respond to increasing received sound levels. Such information should provide useful evidence as to whether ramp-up procedures are an effective form of mitigation.
- 5.0 Visual far-field monitoring
- 5.1 Marine mammal observers should carefully document visibility during observation periods so that total estimates of take can be corrected accordingly.
- 5.2 Aerial surveys should be used whenever possible to supplement the monitoring effort in areas not visible to observers on vessels.
- 5.3 Alternative methods should be developed to improve monitoring of the visual far-field. In this regard, the most promising method is passive acoustic monitoring. Active acoustic monitoring also may be useful under certain circumstances (i.e., when the risk of injury to animals is high), but is itself a source of additional noise and is therefore a less desirable means of monitoring.
- 6.0 Baseline Biological and Environmental Information
- 6.1 NMFS and the Minerals Management Service [now BOEMRE] should work with the industry to develop more rigorous, longer-term research methods for collecting baseline information before activities are initiated.
- 7.0 Comprehensive Ecosystem Assessments and Cumulative Impacts
- The following is a list of "basic tasks" that the "industry, federal agencies, Alaska Native organizations, conservation organizations, and other interested parties could undertake to promote more comprehensive ecosystem assessments":
- 7.1 Emphasize multidisciplinary studies that integrate physical, chemical, and biological measurements to assess human influences throughout marine ecosystems.
- 7.2 Incorporate data collected using all reliable methods and from all pertinent sources, including broad ecosystem studies, more narrowly targeted research, and other activities (e.g., commercial, military) that may have ecosystem effects. These data streams should be integrated spatially and temporally to provide a more comprehensive assessment of the ecosystem.
- 7.3 Archive all collected data in standardized databases for sharing among scientific disciplines.
- 7.4 Maintain and make available detailed logs of all activities in the Beaufort and Chukchi area (e.g., oil and gas, shipping, fishing, scientific cruises, use of ice breakers).
- 7.5 Develop and implement policies and means for sharing data and ensuring that the research community has access to the information needed to conduct more integrated, comprehensive ecosystem assessments.

- 7.6 Develop better and more timely methods for integrating and displaying combined datasets spatially and temporally.
- 7.7 Include data on location and timing of subsistence hunts.
- 7.8 Monitor developments in other regions or scientific disciplines that may reveal better ways of integrating and analyzing multiple datasets or conducting cumulative effects or comprehensive ecosystem analyses.
- 7.9 Include pertinent biological information on the status, ecology, and behavior of the potentially affected species or stocks (e.g., contaminant load, body condition, reproduction, distribution, and relative abundance).
- 8.0 Duplication of Seismic Survey Effort
- 8.1 NMFS should work with the Minerals Management Service [now BOEMRE] and other relevant stakeholders to promote and possibly require data sharing to reduce or eliminate duplicative seismic surveys in the Alaskan Arctic. It may be possible that essential seismic information could be collected by a coordinated survey effort rather than by independent and sometimes duplicative efforts.

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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March 27, 2009

John Goll
 Regional Director
 Minerals Management Service
 Alaska Outer Continental Shelf Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, AK 99503-5823

Subject: Minerals Management Service (MMS) Draft Environmental Impact Statement (DEIS) for the Beaufort Sea and Chukchi Sea Planning Areas - Oil and Gas Lease Sales 209, 212, 217, and 221.

Dear Mr. Goll:

Thank you for soliciting comments on the DEIS for this proposed multi-sale action. The National Marine Fisheries Service (NMFS) has reviewed the subject DEIS and offers the following comments. The DEIS analyzes four Lease Sales (209, 212, 217, and 221) proposed in the Beaufort and Chukchi Seas in 2010-2012. Supplemental EISs may be prepared for Lease Sales 217 and 221. MMS proposes to offer the entire program area for lease in both basins (Alternative II – All Areas Open). Below, NMFS offers general and specific comments for endangered species, marine mammals, commercial fisheries, and fish habitat.

General Comments

We remain very concerned about potential impacts to living marine resources, their habitats, fisheries, and subsistence uses of marine resources as a result of oil and gas lease sales, exploration, and development in the planning areas. The individual and cumulative effects of development in these relatively pristine environments could be significant. The DEIS includes discussions of effects should a warming trend continue in Alaska. The Chukchi Sea, and adjoining Bering and Beaufort Seas, are experiencing a change in oceanic condition, and the effects to marine resources and their movements are uncertain. Therefore, any proposals for development in these areas should fully account for the associated environmental, economic, and social consequences to ensure the continued productivity of living marine resources for future generations.

This is the second time that MMS has written a multi-sale EIS for the Alaskan OCS region. The DEIS presents a fairly accurate description of the environmental baseline within the planning area and describes some impacts that would be associated with the proposed sales. However, the DEIS presents a huge amount of information for stakeholders to digest in a limited amount of



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time, which is greatly complicated by the inclusion of both the Beaufort and Chukchi Seas under the same DEIS. Furthermore, the DEIS is difficult to read and understand, due to its confusing format and the systematic redundancies throughout the document.

The DEIS states that it tiers from the Programmatic EIS prepared for the 2007-2012 5-year program, and incorporates by reference information presented in the Beaufort Sea Multi-Sale EIS for Sales 186, 195, and 202; the Chukchi Sea Sale 193 EIS; and the draft EIS for Seismic Surveys in the Beaufort and Chukchi Seas, Alaska. However, the most recent NEPA document prepared for OCS oil and gas activities in the Beaufort Sea is the Lease Sale 202 EA. That document presents the most recent information on OCS activities in the Beaufort Sea, and should be referenced, rather than the Beaufort Sea Multi-Sale EIS for Sales 186, 195, and 202.

Marine Mammal Issues

General Comments

We have limited our review to sections of the DEIS pertaining directly to marine mammals and the subsistence use of those resources. Consequently, we have not had the opportunity to evaluate the data or models used for oil spill risk assessment.

The Chukchi and Beaufort Sea lease sale areas include important habitat for marine mammals. The proposed multi-sale action described in the DEIS has the potential to result in significant impacts to marine mammal populations and habitats in Alaska. We remain particularly concerned over the individual and cumulative effects of oil and gas activities on the Western Arctic population of bowhead whales. The MMS has responded to these concerns in its environmental studies program, researching many issues and providing decision makers with important data.

One of the most contentious and potentially harmful activities associated with leasing of the OCS is the introduction of underwater noise to the environment. As noted in the DEIS, marine mammals are sensitive to noise and prone to disturbances by human activities. The noise generated by the proposed exploration and development activities (e.g., seismic surveys, icebreakers, airplanes, helicopters, drilling operations and support vessels) has the potential to cause serious impacts to marine mammals. High levels of noise can result in temporary or permanent hearing damage. Even low levels of noise can disrupt biological processes such as nursing, resting or feeding or result in disturbance events. Long term or repeated disturbances and interactions may displace marine mammals from preferred forage areas and migratory routes with potential consequences to animal fitness and reproduction.

Marine mammals are also a resource of enormous cultural and economic importance to coastal communities in Alaska. The proposed activities described in the DEIS have the potential to disrupt or interfere with subsistence hunting activities in communities bordering the proposed lease sale areas. Any impacts to marine mammal populations or alteration of migratory pathways could have significant consequences for subsistence hunters across Arctic Alaska.

However, the DEIS fails to take a hard look at the impacts that oil field development in important habitat areas of the Beaufort and Chukchi Seas might have on marine mammal

populations and subsistence hunters. For example, displacement of migrating bowhead whales or heightened sensitivity to noise may adversely impact traditional subsistence use of these whales by Alaska Natives. We believe repeated exposure of migrating bowhead whales to noise sources may be an example of synergistic impact. While whales may avoid a sound source by moving further offshore before resuming their normal course, and may make such avoidance movements around several sources (additive impact), there may be a point at which the whales remain offshore after exposure to multiple sources, even once the sound source is no longer present. Given the many potential noise sources associated with exploration, development, and production on the OCS, Alaska Natives and scientists consider this a real possibility. MMS should address these concerns in the DEIS through the proposal and analysis of specific mitigation measures designed to address these potential impacts.

While the multi-sale DEIS provides a useful overview of the potential range of activities and environmental impacts that might occur over the next 20 years, this overview is extremely generalized and lacks sufficient site-specific details necessary for a rigorous assessment of the various proposed actions and their potential impacts to marine mammals. The information necessary to properly assess the biological effects of the proposed lease sales must be more thorough and at a much finer scale than what is provided in this DEIS. Unfortunately, much of this essential information is not available. Data to describe marine mammals and their habitat within the sale areas are lacking or inadequate to support impact assessment and mitigation planning. The DEIS contains many statements to this effect, and some of these data gaps are striking given the ecological, social, and cultural importance of the marine mammals in question. For example:

- p. 3-76, "recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are insufficient to be conclusive; studies are under way to further define use patterns."
- p. 3-81, "we caution against over interpretation of these data out of context of survey effort, because these Chukchi Sea data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales."
- p. 4-79, "very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them."

Such data gaps are clearly a hindrance to MMS's ability to prescribe specific mitigation measures for future exploration and development plans or permits. Without a detailed look at when and where marine mammals are likely to be distributed within the lease sale areas, it is difficult to determine what level of interactions are likely to occur, or what the magnitude of potential impacts might be. As a result, it is critical that MMS and its subject matter experts, who are most familiar with the proposed action, present a clear and logical analysis of the proposed action, and the actions proposed to mitigate potential adverse effects resulting from it. Based on this knowledge, the MMS should propose and evaluate a suite of specific mitigation measures to address potential impacts, rather than defer that mitigation and analysis to subsequent actions by NMFS and FWS at some point in the future. The DEIS does not meet this standard.

For example, there is little analysis in the DEIS on the potential impacts to migrating bowhead whale and subsistence hunting of that species in the Beaufort Sea. Other than providing alternatives for deferral areas in the Beaufort Sea, there is little discussion of the effectiveness of time-area closures for mitigating potential impacts to the bowhead whale migrations or subsistence hunting practices. Without more specific descriptions of existing and proposed mitigation measures, it is impossible to evaluate their effectiveness or assess to what degree they will mitigate potential effects of oil and gas activities. As a result, the DEIS fails to analyze the effectiveness of proposed mitigation measures to protect marine mammals, their habitat, and subsistence hunting from potential impacts.

The DEIS should consider that the offshore lease sale areas are not homogeneous with respect to biological significance or environmental challenges. One case in point is the proposed Hanna Shoal deferral area. It does not appear that the DEIS considered the thickness of built up and grounded sea ice in this region in its oil spill risk assessment, or the difficulty industry would face in protecting pipelines from heavy sea ice in this region. The shallow waters of Hanna Shoal often retain grounded sea ice late into the season, which in turn traps floating sea ice, creating a refuge for ice dependent species such as ice seals throughout the open water season. Even during the summer "open water season", exploration and development activities will have a high probability of encountering and impacting ice dependent marine mammal species in this region.

Underwater noise associated with oil and gas leasing, such as seismic and drilling noise, represents a significant source of harassment for marine mammals. The potential for disturbances to marine mammals associated with the proposed action will depend on the timing, location and scale of operations. Activities occurring near productive forage areas such as the Hanna Shoal deferral area, or along migratory corridors (e.g. the coastal zone deferral area) are most likely to encounter and impact marine mammals. Without current and thorough data which describe the habitat use and function of the proposed lease areas, along with the seasonal presence and distribution patterns of marine mammals in the planning areas, it will be very difficult to permit and conduct OCS activities in a manner that has no more than a negligible impact to the stock and minimizes disturbance and harassment to the extent practicable.

The continued lack of basic audiometric data for key marine mammal species that occur throughout the proposed lease sale areas hampers our ability to determine the nature and biological significance of exposure to various levels of both continuous and impulsive oil and gas sounds. Audiometric data, including threshold shifts and recovery for the dominant marine mammals in each region, should be obtained to support lease sale actions and for NMFS to consider authorizing incidental taking under the Endangered Species Act and Marine Mammal Protection Act. Acquisition of these data should precede leasing where acoustic effects on marine mammal species have not been adequately researched.

The DEIS should acknowledge that the uncertain status and trend of the marine mammal populations inhabiting the proposed lease sale areas will make it difficult to detect and quantify any population level effects from the proposed actions. The lack of information on population size and trend will also make it difficult to monitor the impacts and effects of proposed activities. The distribution and habitat use patterns of marine mammals within the proposed lease sale areas are only generally known and may be subject to change in the foreseeable

future, due to changing habitat conditions. Information regarding preferred migratory routes and the identification and delineation of important forage areas are necessary to evaluate potential effects of proposed activities on individuals and populations. We recommend that MMS give high priority to addressing these information needs through its Environmental Studies Program. Until such time as these information needs can be addressed through research and monitoring, we recommend MMS proceed cautiously with long term lease sales to ensure no adverse impacts to marine mammals or important habitat areas occurs. Because data on the impacts to marine mammals are not readily available, the MMS must give a more thorough explanation in the DEIS of how, in light of those gaps, it still believes this action would not cause significant impacts to marine mammals and the communities that hunt them.

As noted in the DEIS, projected sea ice changes are expected to present some significant adaptive challenges for marine mammal population in the near future. For example, in 2008 NMFS was petitioned to list three ice seal species (bearded, spotted, and ringed) as threatened or endangered under the ESA, largely as a consequence of global climate change. Although the merits of that petition are currently under review, it underscores the need to identify and protect important habitat areas and use a precautionary approach to carrying out commercial activities in the Arctic.

Specific Comments

The current organization of the DEIS is unnecessarily confusing, repetitive, and difficult to follow. For example, although effects definitions are provided in section 4.4.1.1, they are unnecessarily reiterated in many subsequent sections of the DEIS. Another source of confusion is that specific topics, such as oil spill impacts, are discussed in multiple places for a single species or group of species (e.g., there is no "one-stop" section for each resource for a complete discussion of potential impacts from oil spills). We suggest that the oil spill scenario section be written such that it can easily be referenced from each section of analysis of impacts, rather than continually repeating information common to all resources in each section of the DEIS.

The information in Section 4.4.1.8.3 seems to be universal to the analyses of impacts to all resource groups; it's inclusion here is confusing and redundant with information presented elsewhere in the DEIS. It is not clear why sections are duplicated repeatedly within each species group (e.g., vessel traffic noise) nor why there are separate sections on "vessel traffic and noise" and "vessel disturbance", and "aircraft noise" and "aircraft disturbance" (e.g., under Alt 1, Other Marine Mammals). These categories of impacts are essentially the same and should be combined for clarity and ease of reading. In general, much information is repeated numerous times in section after section, making the document cumbersome, unnecessarily long, and very difficult to read. For example, why are there two sections on "Effects from Vessel and Aircraft Disturbance" (4.4.1.8.1.2, 4.4.1.8.3.2.4)? The DEIS would be greatly improved if such sections were condensed and consolidated. For example, details of the oil spill analysis should be consolidated into one stand-alone section that individual analysts can refer the reader back to. Additional comments follow:

- Another example of redundancy is the following paragraph found throughout the DEIS: "According to oil-spill records, most accidental spills in Alaska happen in harbors or during groundings. Vessel-related spills on the high seas are considered infrequent

events. Concern has been expressed about increasing tourism and shipping vessel traffic between the Bering Sea and the North Atlantic, especially vessels with crews unaccustomed or ill-prepared for these remote and dangerous areas. If recent performance in the Antarctic is any indication, vessels transiting the Chukchi Sea during ice periods may be prone to ice-related accidents. The ADEC (2007) reports the highest probability of spills of noncrude products occurs during fueltransfer operations at remote North Slope villages. Other sources of petroleum spills include contamination from oil and gas exploration or development."

- What is the purpose of Section 4.5.2.8.1? It only serves as another source of confusion for the reader.
- The recent ribbon seal status review published by NMFS in December 2008 provides the most current information for that species.
- P. 4-181- no discussion is provided of icebreaker effects on belugas.
- Several places in the DEIS mention exploration drilling in the Beaufort and Chukchi Seas in 2007 (p. 4-105, 4-192). NMFS was not aware of any such activities. Could this topic be elaborated on?
- Invasive Species: On p. 2-20, the DEIS states "The Chukchi and Beaufort seas pose harsh and frigid environmental conditions that are believed to impose major and difficult challenges to AIS that might be introduced into the region's waters by vessels or equipment. Therefore, the likelihood of introducing AIS from the Proposed Actions is considered to be very low, and this issue is not considered further in this DEIS." Yet on p. 4-128, the DEIS states "changing conditions potentially could provide opportunity for exotic or invasive species of marine life to expand into the Chukchi or Beaufort sea, and potential pathogens and parasites previously absent in the Arctic could survive and affect Arctic species lacking resistance or immunity." A similar statement is made at p. 4-657. This is an issue of serious concern to NMFS; consequently we would like a detailed explanation of this discrepancy in the DEIS.
- There are many other contradictions throughout the DEIS. For example, p. 4-701 of the DEIS states that "In the Chukchi it is estimated that 10 exploration wells could be drilled on the existing leases." In the very next paragraph, it says "In the Chukchi, it is estimated that 8-14 exploration wells could be drilled on the existing leases."
- Some sections of the DEIS say that "oil and gas development in the Chukchi Sea is not considered reasonably foreseeable", other sections say that "it is reasonable foreseeable to assume production activities could occur in the foreseeable future." Please clarify the position that MMS is taking in this regard.
- P. 4-187 refers to sections of the DEIS that do not exist: "activities noted in Sections 4.4.1.8.2.1 and 4.4.1.8.2.2..."
- On p. 4-453, the DEIS states "The MMS mitigation measures likely would require no discharges into marine waters but that they be treated and disposed of into the subsurface in disposal wells or barged to and disposed of in designated and approved disposal wells," and on p. 4-506, the DEIS states "mitigation measures require that most discharges (cuttings and drilling muds) from production wells be reinjected into authorized disposal wells." Could the MMS elaborate on this point? Specifically, is the MMS advocating a "zero-discharge" policy with regard to drilling muds and cuttings?
- P. 4-602, "The primary reduction in impacts of this deferral would be to exclude disturbance and collision impacts to endangered whales arising from exploration

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activities in these blocks for the remainder of the 2007-2012 5-Year Program period." Why does the reduction in impacts only last for a 5-year period? Why not for the life of the sale?

- Citations and rationale for conclusory statements are largely lacking throughout the marine mammal sections, particularly for the Chukchi Sea. For example, under Alt 1, Chukchi, T&E Whales, there is a distinct lack of citations for the information presented. Please provide citations here, and throughout the other marine mammal sections, so that we are able to tell what primary sources were used to arrive at the conclusions presented in the DEIS.
- P. 4-656, 2nd bullet: what species is being referred to here?
- P. 4-795, Mitigation measures are mentioned in Section 4.5.2.6.1.3, but the section references itself in the last sentence.

Oil Spills

The potential for a major oil release into the arctic marine environment is the most significant risk to marine and coastal wildlife associated with this proposed action. As a result, we urge MMS to seek NMFS review of all future Oil Spill Response Plans (OSRPs) submitted to MMS for approval to ensure adequate safeguards are included in OSRPs for our trust species.

- On p. 4-17, the DEIS cites ADEC, 2001 for assumptions regarding oil spills. Please include a discussion of all the pipeline spills on the North Slope since 2006 which have resulted from corrosion of existing pipelines. Although these have been terrestrial spills, they are still indicative of what normal "wear and tear" can do to pipelines, particularly in a more corrosive and inaccessible environment such as under marine waters, and should be considered when making assumptions about oil spills.
- On p. 4-23 and p. 4-824, LEOS is cited as one method to detect subsea pipeline leaks. In other recent MMS NEPA documents (e.g., the 193 EIS), this system was described as "proven to detect leaks equal to <1% of the total daily pipeline flow. This type of technology will help prevent large undetected oil spills from small chronic leaks under the ice." However, the rate at which BP's large oil spill on Alaska's North Slope occurred in March 2006 was small enough that it would not have been detected by LEOS. According to the Alaska Department of Environmental Conservation, the leak detection system on the pipeline that leaked was "successfully tested in 2002 as capable of detecting a leak of 0.5 percent of the flow in 24 hours. That detection level is significantly more sensitive than the current regulatory requirement of 1 percent." However, ADEC findings indicated that the rate of oil loss may have occurred over time at a rate that was below the rate of loss that would have to occur to trigger the leak detection system. Although this spill occurred on land, next to a main trunk road on the North Slope, it still went undetected long enough for over 200,000 gallons of oil to spill from the pipeline before it was discovered. In light of these facts, we encourage MMS to continue to work to improve technology to more effectively identify potential leaks in subsea pipelines. Although the March 2006 spill occurred in a pipeline that did not utilize the LEOS system, it still indicates that the LEOS system is obviously inadequate to mitigate large oil spills from chronic subsea pipeline leaks of this type. LEOS is not, as stated in the DEIS, "proven to provide adequate leak detection."

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- On p. 4-24, the DEIS suggests tracking an oil spill can be accomplished through the use of FLIR. The DEIS should explicitly state that this technology is largely inadequate for tracking an oil spill, as it would not be useful once the oil spill reached ambient temperatures. That would not take long in the arctic environment, and therefore is not really a useful tool for tracking and responding to an oil spill.
- On p. 4-25, the DEIS states "oil-spill response equipment dedicated to oil-industry spill response on the North Slope is located primarily in Deadhorse." This is inadequate for responding to potential oil spills in the Chukchi, due to the distances involved and the complications resulting from unpredictable weather conditions across the North Slope. The DEIS states "an effective response, regardless of the environment relies on...the ability to act quickly once the event occurs." How does MMS intend to address this contradiction?
- Oil spill clean-up in the broken ice and open water conditions that characterize arctic waters is problematic. In the 193 EIS, the MMS noted that there are difficulties in effective oil-spill response in broken-ice conditions:
"The MMS advocates the use of nonmechanical methods of spill response, such as in situ burning, during periods when broken ice would hamper an effective mechanical response. In situ burning has the potential to rapidly remove large quantities of oil and can be employed when broken-ice conditions may preclude mechanical response. However, there is a limited window of opportunity (or time period of effectiveness) to conduct successful burn operations. The type of oil, prevailing meteorological and oceanographic conditions, and the time it takes for the oil to emulsify define that window. Once spilled, oil begins to form emulsions. When water content exceeds 25% most slicks are unignitable".
Yet the DEIS states on p. 4-27 that "ISB is the preferred method of non-mechanical response for ice-infested waters." What is MMS doing to address the admitted inadequacies of their "preferred method of non-mechanical response for ice-infested waters?"
- On p. 4-28, the DEIS discusses the use of dispersants for responding to an oil spill, yet admits "aircraft could be over the spill site within 9 hours to apply dispersants." That could be a critically long time to effectively respond to an oil spill. What is MMS doing to address this weakness in its response strategy, considering that the DEIS states "an effective response, regardless of the environment relies on...the ability to act quickly once the event occurs?"
- On p. 4-461, the DEIS states "The probability of an oil/fuel spill increases with more and broader regional distribution of oil- and gas-related activity..." Also, on p. 4-518, the DEIS states that "Production from these existing leases and any new leases is not anticipated, but we evaluated the potential effects of production, including the potential for a large spill, and these effects closely approximate the levels of effects described for the previous lease sales." What is the cumulative oil spill probability for all active and proposed sales (e.g., 193, 202, 195, etc.)? It doesn't make sense to separate oil spill probabilities for Beaufort/Chukchi for migratory species such as bowheads.

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Beaufort Sea

Four extensive areas in the Beaufort Sea previously were recommended for deferral during scoping for the 2003 Beaufort Multisale EIS. The same four areas were again recommended for deferral during scoping for this DEIS. However, this alternative (termed the "Large Bowhead-Whaling Deferral Area in the Beaufort Sea" in the DEIS) was considered, but not included in this DEIS for further analysis, without explanation. We request the reason for this be further explained. For the purposes of mitigating potential impacts to subsistence practices, we also request that this alternative be included and analyzed as an alternative to the Proposed Action.

As written, the DEIS seems to intend that the alternatives presented are mutually exclusive. In other words, no alternative includes all three Beaufort Sea whaling and the Beaufort Sea Deepwater deferral areas. However, in the absence of the Large Bowhead-Whaling Deferral Alternative mentioned above, we recommend the adoption of Alternatives 3, 4, 5, and 6, inclusive, as the preferred alternative. The combination and selection of these four alternatives would help reduce potential conflicts between bowhead whale subsistence hunters and offshore oil and gas operations.

Chukchi Sea

MMS's analysis supporting Alternative 2, Proposed Action for Sales 212 and 221, did not present a strong enough case to NMFS that marine resources would be adequately protected. The MMS presents a broad, but certainly not exclusive, range of potential alternatives for consideration. Much of the coastal region within the Chukchi Lease Sale area is an important subsistence hunting area for Alaska Native villages on the Chukchi Sea. Leasing and exploration activity in these waters would increase the potential for impacts to subsistence hunting.

NMFS strongly recommended Alternative III (Corridor I deferral) for Lease Sale 193, yet this alternative was considered in this DEIS, but not included for further analysis. However, no real explanation was given, other than saying the effects would be essentially the same under both the Corridor 1 and Corridor 2 alternatives. That is a curious conclusion, considering the two alternatives provide a protective buffer offshore of the coastline of 60 miles versus 25 miles, respectively. In our comments on Lease Sale 193, we noted the limited amount of biological and physical information available for the Chukchi Sea. Alternative III (Corridor I) offered a larger migration corridor for marine resources, including those that are important to subsistence activities. Thus, this Alternative offered a precautionary approach to afford protection to marine resources in a data limited environment, and should be included for analysis as an Alternative in this DEIS.

We strongly endorse the inclusion and selection of the original Alternative III from Lease Sale 193 for several reasons. This would:

- Provide some degree of impact reduction for the endangered bowhead whale, as this population migrates through the nearshore lead system of the sea ice during its spring migration into the Beaufort Sea. The spring lead system is one of the most sensitive environments for these whales.

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- Afford some mitigation and avoidance for the Native villages along the Chukchi coast which depend on subsistence resources, especially marine mammals.
- Protect nearshore marine resources and reduce the potential for a catastrophic event to impact benthic habitats, migratory current corridors, and nearshore estuarine habitats.
- Offer a precautionary setback to better protect marine resources facing warmer oceanic conditions and larger open water areas.
- Reduce the effect of seismic geophysical surveys occurring in the Hannah Shoal region and the productive nearshore zone of the Chukchi Sea.

Several of the alternatives in the DEIS contain deferrals that would also protect important habitat and subsistence hunting areas to some degree, but unfortunately these are presented in a mutually exclusive fashion. For example, Alternative 3 recognizes the importance of the near shore coastal zone for migrating marine mammals and marine mammal subsistence hunting, while Alternative 5 recognizes the Hanna Shoal region as a unique and diverse habitat and as an important feeding area for gray whales and other marine mammals. However, none of the alternatives presented would protect both of these important habitat areas. MMS should develop and consider an alternative that defers leasing in both these areas until such time as it can be demonstrated that exploration and development activities in these sensitive regions can be accomplished without significant impacts to marine mammal populations or subsistence hunters.

Alternative 3 as adopted in this DEIS was developed by MMS as the Corridor II deferral alternative in the Sale 193 EIS to reduce potential conflicts between subsistence users and OCS oil and gas operations, and was ultimately selected as the preferred alternative. In the absence of other alternatives to consider, we recommend combining Alternative 3 with Alternative 5, the Hannah Shoal Deferral Alternative, and Alternative 6, the Chukchi Sea Deepwater Deferral, as the preferred Alternative. This would better protect marine mammals, their habitat, and subsistence hunting, and reduce unnecessary work on areas likely to have low industry interest. In the absence of that, adoption of Alternative 3 by MMS as the preferred alternative would help to reduce potential impacts to marine mammals and subsistence practices.

However, as noted above, we strongly recommend that Alternative III from the 193 EIS should be included for analysis as an Alternative in this DEIS, as it offers a precautionary approach to OCS development, and affords protection to marine resources in the current data limited environment.

Legal standards of the MMPA have not been fully presented or considered

Section 101(a)(5) of the MMPA provides for the incidental, but not intentional, taking of small numbers of marine mammals for maritime activities provided that the Secretary finds the total of such takings will have no more than a negligible impact on the species and does not have an unmitigable adverse impact on the availability of these species for subsistence uses. Activities occurring in areas used by large numbers of animals or areas of biological significance to the population may not qualify for take exemptions, unless it can be demonstrated that mitigation measures can effectively reduce potential impacts to animals in these regions.

The MMPA standard also restricts take authorization to activities unlikely to have an unmitigable adverse impact on the availability of these species for subsistence uses. Chukchi

Sea Lease Sale 193 deferred leasing of near shore blocks, in part, to minimize potential impacts to subsistence hunting of marine mammals near coastal communities. The DEIS provides no compelling information suggesting that the concerns of the subsistence hunting communities have been addressed, or that any evaluation of existing mitigation measures to mitigate impacts to subsistence uses has been undertaken. Indeed, much of the public record contained in the DEIS indicates that these concerns persist and that ongoing exploration activities in the region may be impacting subsistence hunting near the communities. As noted above, we recommend that the MMS defer leasing in the coastal zone, particularly near subsistence communities, until adequate mitigation standards have been developed to address concerns about impacts to subsistence hunting. Further, we recommend that MMS prepare a NTL advising that MMPA take authorization may not be possible in biologically sensitive regions or in areas important for subsistence hunting of marine mammals.

Cumulative Impacts

The DEIS should present an expanded discussion of oil and gas activities within the Canadian Beaufort, particularly off the McKenzie delta, as well as vessel movement into and out of Canadian waters necessary to support activities within the Alaskan OCS region. Cumulative impacts associated with activities in Canadian waters would present several concerns with respect to bowhead whales and subsistence hunting, especially as late season traffic in the eastern Beaufort Sea would be most likely to encounter and harass these whales.

Mitigation

The EIS states that “the analyses in this EIS also consider whether the mitigation that is proposed as part of the proposed actions is likely to reduce or eliminate all or parts of the potential adverse effects.” However, from the text of the analyses, it is not clear how this was accomplished. Rather, MMS seems to have resorted to conclusory statements that mitigation will be effective in place of explaining and analyzing how, in fact, mitigation measures will reduce effects. In order to be effective, a mitigation measure must be supported by analytical data demonstrating why it will constitute an adequate buffer against the negative impacts that may result from the authorized activity. Stakeholders must be able to review, in advance, how specific measures will mitigate potential impacts to the environment. In order to rely on mitigation to obviate further analysis, the measure must be identified and its effectiveness analyzed. For example:

- Throughout document, “mitigation” is cited that would “avoid or eliminate” adverse effects, yet the “mitigation” is rarely specified, analyzed, or a description provided on how the “mitigation” would in fact mitigate potential effects.
- On p.2-13, the DEIS says the lease stipulation to prohibit permanent OCS production facilities within a 10-mi radius shoreward of Cross Island was considered but not incorporated into this action. The objective of the stipulation was to ensure that OCS development in that area did not preclude reasonable subsistence access. The DEIS states “analysis of the measure concluded that the stipulation would provide little protection of subsistence whaling activities”, and was not included for further analysis. What was the analysis that was conducted of this measure which contravened MMS’s previous inclusions of this stipulation as mitigation in its NEPA documents? No

explanation is given for why this stipulation was dropped. Please provide a detailed explanation of what analysis was conducted, and how the conclusion was reached that this mitigation was no longer effective or needed.

- On p. 2-16, lease blocks are listed to which Stipulation #3 (Permanent Facility Siting in the Vicinity Seaward of Cross Island) apply, yet it is not clear how these blocks differ from the original lease stipulation described on p. 2-13 which was dropped from further consideration in this EIS. Please explain the difference, as this is a point of confusion.
- On p. 2-16, the new NTL No. 08-A02 is described, and Adaptive Management and Mitigation Plans are alluded to. What does this mean? What are some specific mitigation measures that may be adopted to mitigate future EPs and DPPs, based on MMS’s past experience?
- Information is presented on the effects of ice-breakers on marine mammals (e.g., p. 4-89, “effects of an actual icebreaker on migrating bowheads, especially mothers and calves, could be biologically significant”), yet nothing in the DEIS specifically addresses mitigating this potentially significant source of disturbance to marine mammals. How does MMS intend to mitigate the effects of icebreakers on marine mammals?
- P.4-105, “We believe that the strongest effects could be avoided through careful shaping of the action through the implementation of sufficient monitoring coupled with adaptive management to focus area, timing and bowhead presence-related mitigating measures where most needed.” What specifically does the MMS envision, and how, specifically, would this help to avoid the “strongest effects?” Details and analysis of the “mitigation” alluded to is notably lacking.
- P.4-121, “additional mitigation measures (Appendix G) may be selectively incorporated.” However, there is nothing there; Appendix G is blank.
- P.4-123, “required mitigation would avoid or minimize the effect of such activity (icebreakers) on spring and fall whale migration so as to not interfere with the traditional availability of bowhead for subsistence hunts or concentrations of vulnerable cows and calves in the spring lead system.” What is the mitigation referred to, and how would it “avoid or minimize the effect” of icebreakers?
- P.4-124, “Mitigation measures would be required to avoid deflecting migrating whales away from subsistence-hunt areas when drillship location is east of subsistence hunting areas and periods avoid impacts to subsistence harvest opportunity. Similar mitigation would be applied should delineation and production wells be developed. Synergistic adverse effects as result of platform placement and construction, drilling, and other concurrent activities are avoided or minimized by application of mitigation measures that avoid or minimize the footprint of multiple activities relative to bowhead whale and other endangered whale biological activities and subsistence-hunt periods.” Again, what are the mitigation measures being referred to, and what analysis led to the conclusion that only minor temporary, nonlethal effects would take place?
- P. 4-451, “The MMS would impose mitigation measures to avoid deflecting migrating whales away from and provide for historical levels of whale access to and presence within subsistence-hunting areas during hunting periods, when drillship location is east of subsistence-hunting areas, to avoid impacts to subsistence-harvest opportunity. Similar mitigation would be applied should delineation and production wells be drilled. Synergistic adverse effects as a result of platform placement and construction, drilling, and other concurrent activities are avoided or minimized by application of mitigation

measures that avoid or minimize the footprint of multiple activities relative one another and to the bowhead whale and other endangered whale biological activities, movement, and subsistence hunts.” A similar statement is made at 4-797. What are the specific mitigation measures being referred to, and what analysis has been conducted to reach the conclusion that there will be no effect to bowhead whale migration and subsistence?

- P. 4-459, “Depending on where discovery and production activities occur, MMS-required mitigation measures would ensure whale movement into harvest areas, subsistence-hunting activities, and opportunity to harvest bowhead whales are not impaired or enhanced by OCS actions. The OCS activities are not anticipated to alter the subsistence harvest or the vulnerability of bowhead whales to harvest.” Again, what are the specific mitigation measures being referred to, and what analysis has been conducted to reach the conclusion that there will be no effect to whale movements and subsistence?
- We strongly endorse the command system concept outlined on p. 4-448 and p. 4-794. In 2008, NMFS, MMS, and FWS successfully implemented a trial run of this system. We feel the continued implementation and improvement of this system would greatly enhance the ability to manage the synergistic effects of multiple OCS activities that may occur simultaneously and in proximity to one another.
- P. 4-500, “The potential effects from MMS-authorized activities would be moderated by the mitigation and monitoring measures (NTLs and ITLs) listed in Appendix F.” However, ITLs are not listed in Appendix F of the DEIS.
- P. 4-500, “Any MMS-required measures would be in addition to or superseded by those mandated under an IHA or LOA.” No specific mitigation is identified, or analyzed in the context of the proposed action and its potential effects.

In short, mitigation measures alluded to in the DEIS for the subsistence use of marine mammals are inadequate. The result is that MMS has failed to take a hard look at the potential effects of OCS activities on subsistence hunting. The document frequently references further mitigation measures to be prescribed at a later date by NMFS and USFWS through the MMPA authorization process to help mitigate impacts to subsistence hunters. However, these mitigation measures are not explicitly identified in this document and, consequently, cannot be evaluated. Therefore, MMS abdicates its responsibility for analyzing the effects on subsistence practices by leaving it up to other parties to mitigate the impacts, outside of the NEPA process. In order to rely on mitigation measures to obviate further analysis of impacts to hunters, MMS needs to identify the specific measures and analyze their effectiveness at mitigating potential impacts. Only a carefully constructed and monitored mitigation plan is likely to address potential impacts to subsistence hunting, and these mitigations need to be detailed in this DEIS to evaluate their efficacy at mitigating potential effects.

Following are some recommendations to mitigate the impacts of proposed activities on marine mammals and subsistence practices. These recommendations are by no means comprehensive. In order to reduce the impacts of multiple, concurrent exploration and development projects in biologically sensitive regions, we recommend MMS: (1) consolidate support operations to the greatest extent possible; for example, share support operations to reduce the number of boats and aircraft operating in an area, (2) fund research on suppression of high-frequency noise and other methods of noise reduction, (3) review future exploration and development plans with NMFS and subsistence hunting organizations regarding the timing and location of simultaneous operations to ensure the least practicable impact to marine mammals and subsistence activities,

(4) provide for specific time/area closures to protect subsistence hunting practices, and (5) allow NMFS to review all future OSRPs submitted to MMS for approval to ensure adequate safeguards are included for our trust species. This will enable us to make recommendations based on the latest information resulting from changes in Arctic ecosystems and our knowledge base.

Commercial Fisheries

While no commercial fisheries occur in the lease sale area, MMS should be aware of recent discussions undertaken by the North Pacific Fishery Management Council (NPFMC) and NMFS regarding the northward expansion of Bering Sea fisheries. Recently, the NPFMC prepared a Fishery Management Plan (FMP) for Arctic waters. For FMP purposes, Arctic waters are all waters north of the Bering Strait. The Arctic FMP is accompanied by an Environmental Assessment (EA) and Regulatory Impact Review/Initial Regulatory Flexibility Analysis (RIR/IRFA). These documents support NMFSs and the NPFMCs precautionary approach to conserve habitat in absence of research, and protect habitat where uncertainty exists. If approved and implemented by NMFS, the Arctic FMP would close Arctic waters to commercial fishing activities until such a time that systematic surveys have been properly designed, implemented, and, with scientific certainty, indicate that sustainable commercial fisheries can occur. For more information see <http://www.fakr.noaa.gov/sustainablefisheries/arctic/>. NMFS offers these most recent developments as these may be complementary to the MMS’s Alaska Environmental Studies Program and Coastal Marine Institute.

Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires a federal agency to consult with NMFS for any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken by such agency that may adversely affect EFH. MMS initiated EFH consultation by copy of the DEIS.

NMFS has reviewed the DEIS and finds the various EFH sections difficult to ascertain whether or not MMS has determined their action may have adverse effects on EFH. An example is within the EFH section under Alternative II (Section 4.4.2.5; page 4-441) as “the direct and indirect effects of implementing this alternative would have no more than minor level of effect on EFH”. Alternative II is the proposed action, or preferred alternative, and yet no clear determination is offered using *may adversely affect EFH*; the point when MMS needs to further describe impacts on EFH.

Further, EFH sections of the deferral Alternatives III, IV, and V offer “...this alternative would result in a somewhat reduced level of adverse affect”; “...this reduction in size would reduce adverse effects to EFH...”; or “minimize adverse effects to EFH”. Importantly, the use of adverse affect is now mentioned and is compared directly to Alternative II. However, Alternative II states that only minor effects to EFH will occur. The adverse affect determination becomes important because once this is determined, an EFH Assessment is required. Thus, NMFS finds these determinations contradictory and unclear.

The DEIS begins to discuss mitigation measures in Section 2.2, however the discussion is basically a regulatory overview; no specific mitigation measures are offered. Further, specific mitigation measures by alternative do not offer any specific measures to avoid, reduce, or mitigate for adverse affects. Section 4.4.2.5.2 offers three primary mitigation measures "to avoid or minimize adverse effects to EFH". Again, the discussion conflicts with the previously stated minor effect determination. More importantly, the first mitigation measure notes seismic operations would not occur in Ledyard Bay Critical Habitat. While critical habitat is important to discuss, this designation has no relationship to EFH and any adverse effects. The remaining two measures are also specific to seismic operations. MMS offers a reduction of effect may occur from not operating adjacently and simultaneously, however, little if any conservation benefit could be really be measured. NMFS asks what would be the measure of effect.

The MSA defines the term *fish* to mean any finfish, mollusk, crustacean, and all other forms of marine life animal life other than marine mammals or birds. This definition is important to consider because Section 4.4.2.3 of the DEIS summarizes affects from oil exploration and development activities on lower trophic marine organisms. Many of these organisms are EFH species or prey of EFH species. Specifically, this section details potential discharge wastewater potentials and describes effects to kelp communities from seismic cables.

MMS offers that many unknown areas are affected by seismic cable laying operations. Limited data exists to determine how rare these areas are. What is commonly known is that these living substrates are sensitive, ecologically significant, provide cover, and concentrate prey. In summer 2008, Arctic seismic cable laying and retrieval operations encountered kelp habitats (MMS Staff contacted NMFS staff). Using that lease sale's mitigation measures, these operations were to avoid or modify operations should activities contact unique, biologically significant habitats or areas deserving protection. Kelp densities meet these considerations. Organisms were released wholly or partially back into the marine environment. However, MMS has not demonstrated that operations were not drastically modified nor what avoidance measures used.

Foremost, conservation measures should offer to avoid sensitive habitats. MMS likely has the information to demonstrate a better knowledge of these areas and offer measures to avoid them. Seismic vessels are some of the most state-of-the-art vessels in the marine industry. There mission is to identify seafloor substrates and beyond. NMFS offers that these vessels should be able to pre-survey areas for concentrations of living substrates and avoid these areas entirely.

DEIS Figure 3.2.1-4 depicts seismic transect coverage throughout the planning areas and the overlapping of transects are several times over one another. Information is also somewhat limited, because even more data has been collected than is shown. Additionally, recent transect data are not available for public release. NMFS fails to understand why all levels of information are proprietary, when it is rather obvious the entire area has been covered and some usable information, such as substrate type, would likely be non-proprietary. Nonetheless, NMFS feels that MMS has the information to describe both living and non-living substrates from data transects and can do so in manner that does not release confidential data. Lastly, effects to sensitive living marine substrates, such as kelps and sponges, need to be mitigated for; MMS needs to address this concern.

In previous comments, NMFS has noted the limited amount of biological and physical information for the northern Chukchi and Beaufort Seas. NMFS found the data base prevented meaningful analysis and could not support MMS conclusions of minor effects to fish populations. Unfortunately, little additional fisheries information has been recently gathered. We continue to find that the extant data do not support the impact assessments presented in the DEIS, and recommend additional research on the coastal, anadromous, and marine fishery resources within the planning area.

Conclusions

NMFS recommends that MMS develop and adopt more protective alternatives than those presented in the DEIS. MMS's analyses supporting Alternative II do not present a strong enough case to NMFS that marine resources would be adequately protected, nor are mitigation measures presented in a manner which allows for stakeholder evaluation of their effectiveness. Further, the DEIS is insufficient to be used supplementally, or to be "tiered" from future assessments. NMFS's conclusions are based upon the following:

- Existing Chukchi and Beaufort lease sale blocks, and any subsequent developments, provide for oil production to expand in the Arctic Region. MMS needs to demonstrate that additional OCS activities can occur in an environmentally sound manner. This multi-lease sale is duplicative and the potential for oil related incidents increase exponentially. This reasoning is supported by existing area lease Figures 3.1.1-2 and 3.2.1-3 and by oil trajectory predictions Maps A.1-2a through d.
- Comprehensive, region-wide, systematic research is needed to determine habitat distribution, such as to delineate non-living and living substrates. NMFS is willing to discuss cooperative efforts with MMS and industry to utilize existing substrate data to delineate these habitats.
- The DEIS lacks a clear determination as to whether or not EFH will be adversely affected by the Proposed Action - Alternative II. MMS needs to: 1) determine whether or not their actions may have an adverse effect on EFH; 2) submit an EFH Assessment, including mandatory contents [50 CFR 600.920 (e)], if adverse affects are determined.

For further coordination on this lease sale please contact Brad Smith regarding marine mammal issues (907-271-3023) or Matt Eagleton regarding fish habitat issues (907-271-6354).

Sincerely,

for John M. Yane
Robert D. Mecum
Acting Administrator, Alaska Region

cc:
NMFS AKR (matthew.eagleton@noaa.gov; brad.smith@noaa.gov; james.wilder@noaa.gov)
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NMML (robyn.angliss@noaa.gov)

Northern Alaska Environmental Center Comment



July 11, 2011

Dr. James Kendall
Regional Director
BOEMRE Alaska OCS Region
3801 Centerpoint Dr.
Anchorage AK 99503-5820
VIA FEDERAL ERULEMAKING PORTAL www.regulations.gov

Re: Chukchi Sea Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement, OCS EIS/EA BOEMRE 2010-034 (May 2011)

Dear Regional Director Kendall:

We are pleased to provide this letter of public comment on behalf of the Northern Alaska Environmental Center and our 1,700 members—most of whom reside in Alaska.¹ We are a regional non-profit organization based in Fairbanks Alaska celebrating its 40th anniversary of promoting conservation of the environment and sustainable resource stewardship in Interior and Arctic Alaska through education and advocacy.

We appreciate this opportunity to discuss the future of the Arctic Ocean's living ecosystem. Here in Fairbanks our community has an important stake in this issue. Our community is tied to the oceans by the Pacific salmon that migrate from the sea up the Yukon to the Tanana River where people have fished them for at least 11,500 years. We are connected by migratory birds that fly past on their way to Arctic nesting grounds. Our community is connected socially to people living in coastal communities.

And like all Americans we care about the future of the diversity of wildlife that depends on the productive Chukchi Sea waters, from whales to seals and polar bears, and its ecological connections to the surrounding coasts. Across town, the University of Alaska Fairbanks has made major scientific contributions not only to marine science but to our understanding that

¹ These comments supplement the testimony Pamela A. Miller provided on behalf of NAEC at the public hearing in Fairbanks on June 23, 2011, and the technical letter sent on our behalf along with other environmental organizations by Earthjustice today. Furthermore, since we have earlier addressed many of the issues still at hand in this draft SEIS, particularly the continued failure to address essential scientific data gaps, we also request that all of our earlier public comments on Chukchi Sea lease sales (Sale 193, as well as the underlying 5-year Plan comments for 2002-2007, 2007-2012, and 2012-2017) be incorporated by reference.

Northern Alaska Environmental Center Comment

the Arctic serves as the air conditioner to the world, affecting climate and oceans at the global scale, and that melting sea ice from the most rapid warming anywhere has introduced great uncertainty into future plans.

We note that half of the public hearing testimony given at the Fairbanks public hearing on the revised draft SEIS opposed the proposed lease sale and Chukchi Sea offshore drilling and raised concerns about the risks of disastrous spills to sensitive environment.²

We are at this juncture to provide public review of the revised draft SEIS because of the federal government's failures, not just once but three times to provide an adequate scientific analysis of the impacts of offshore oil and natural gas development and a failure to apply common sense to the risks of major oil spills in the Chukchi Sea that cannot be cleaned up in broken ice and extreme conditions that exist most of the year. During this time BP's Deepwater Horizon offshore oil spill blowout took place. Even though this time BOEMRE has finally acknowledged significant impacts from a blowout or very large oil spill, the decisions still have not changed.

This revised draft SEIS is a hard-won step in light of the poor and rushed lease sale by the Bush Administration that was found to be legally deficient.

The Northern Alaska Environmental Center joined with Native Village of Point Hope and other Alaska Native communities in the legal challenge to this lease sale due to a number of concerns, especially the lack of an adequate scientific underpinning of the decision to lease millions of acres across the Chukchi Sea for the first time since 1990 and the agency's lack of common sense in its consideration of the daunting risks of an oil spill.

The stakes are high to the marine and coastal environment with chances of a major spill (>1,000 bbls) is 27-54% from the drill platforms or pipelines as a result of Chukchi Sea Sale 193, as the original FEIS noted.³

However, the impacts of blowout spills were not analyzed originally in the Final EIS from June 2007 which said "we consider blowouts to be unlikely events." MMS still did not consider the impacts of blowout spills in its Sept 2010 revision released after the Deepwater Horizon spill.

This new revised draft SEIS does disclose that drilling in the Chukchi Sea could result in a Very Large Oil spill – like last year's Deepwater Horizon and that it could have significant effects on essential fish habitat for Arctic cod, saffron cod and all 5 species of Pacific salmon, polar bears, birds, bowhead, fin and humpback whales, and subsistence by coastal communities. Yet, the analysis of environmental impact – especially cumulative impact of spills – remains inadequate.

² Author's notes. See also Fairbanks Daily News-Miner, June 24, 2011, "Fairbanks residents weigh in on Chukchi Sea drilling."

³ FEIS, 2007, IV-20.

The Very Large Oil Spill trajectory analysis, like all of MMS's prior presentations of information, still relies on the work done for the original EIS documents, and does not provide understandable, mapped information that the public can decipher. Those trajectory analyses were not carried out or presented in a way that can be understood by the public regarding how the spread of oil could unfold from drilling in different parts of the leased areas and in different seasons so that a true analysis of spatial leasing alternatives / mitigation measures could be done, and so that alternatives could be compared. Furthermore, the trajectories still were only done with an assumption for a limited period of time after the oil was spilled.

The revised draft SEIS should consider the risks from a very large oil spill caused by a tanker spill, as we pointed out in our Dec 26, 2006 letter on the draft EIS for Sale 193, as well as the increased risks of oil tanker spills in the event that both LNG and crude oil tankers are travelling from the offshore platforms. MMS acknowledged that "Arctic warming could change the feasibility of marine transportation through the Arctic," yet excused its lack of tanker analysis by saying that the "most practical way to transport oil from the Chukchi Sea OCS would be by pipeline across NPR-A and then through the established TAPS and tanker route."⁴ However, it still has not considered mitigation measures that would strictly prohibit tanker operations, whether for LNG or for crude oil.

We are disappointed that the revised Draft SEIS continues to provide a business as usual approach by BOEMRE to move forward with risky oil and gas activities in the Arctic Ocean in the absence of critical scientific information. In fact, this document appears designed to justify the earlier decision to hold Lease Sale 193 rather than provide a meaningful reanalysis to inform a reconsideration of the decision.

The natural gas impact analysis is fundamentally flawed in its assumptions for the analysis in the revised draft SEIS. It does not address the number and type of exploration and production wells, alternative pipeline routes and construction and operational activities, noise levels for construction and operations, and alternatives for the infrastructure and activities including where it crosses land. Initially, in the draft SEIS (BOEMRE 2010-34, September 2010) it simply piggybacked onto the oil development analysis, while it is possible that the natural gas prospective areas may differ from the oil development areas either in timing or location, different companies could choose to develop at different locations, or more than one development platform may be needed ("This scenario assumes that any natural gas development and production would utilize an existing (due to oil development and production) platform located near the center of the Sale 193 area. This is the same platform location as was assumed and analyzed in the 193 FEIS.... The gas development and production scenario would also utilize the existing shorebase, and run new offshore and onshore gas pipelines along the same corridor as the existing oil pipelines" (draft SEIS September 2010, p. 17). We have searched the maps from the earlier Sale 193 Sale documents, and cannot find any maps showing the location of the one assumed platform location, nor is this contained in the current

⁴ FEIS, Vol. II, Response to Comment NAEC 011-003.

document that states "Gas production would utilize the same oil production platform described in the Sale 193 FEIS scenario." (p. 80, revised draft SEIS, May 2011).

Furthermore, this assumption of the need for just one oil and gas development platform is contradicted by information that MMS provided to coastal communities along the Chukchi Sea in November 2007 which indicated the possibility that more than one potential offshore natural gas platform location could be located within the Chukchi Sea, and more than one potential shoreline landfall and "shorebase" and gas pipeline route (see *Scenarios and Benefits from Development in the Chukchi Sea* by James Craig, MMS, sent via separate attachment). It is impossible to understand the draft SEIS analysis for natural gas without a map being included in this document itself that shows the potential production islands, pipeline routes, and shorebases.

The revised draft SEIS fails to adequately address the impacts from construction of the new natural gas pipeline, especially the impacts from construction of a gravel causeway in the highly dynamic Chukchi polynya where currents are complicated, moving ice is present throughout winter, and the highly productive waters support critical migrations of whales, birds, and other marine mammals and support subsistence resources. The revised draft SEIS stated on p.94, "at a coastal landfall, the pipeline likely would be elevated on a short gravel causeway to protect it against shoreline erosion... Overall, installation of the new offshore gas pipeline would cause direct and indirect impacts similar to vessel anchoring, but would do so on a much larger scale. Though negative impacts to marine salmon as well as Arctic and saffron cod would be expected, they would remain temporary and localized."

There is no scientific justification for this conclusion, nor any indication of any scientific analysis of currents, expected changes to water temperature and salinity, alteration of coastal currents that may affect migrations and water quality, changes to beach erosion and sedimentation, and impacts to Essential Fish Habitat. Offshore causeways in the Beaufort Sea have been documented to have significant impacts to oceanographic processes including water temperature and salinity that are essential habitat features for anadromous fish (see findings of U.S. Army Corps of Engineers by Col. Kakek and by the EPA regarding the West Dock and Endcott Causeways).

The revised draft SEIS states an assumption that the landfall would be at Wainwright (p.80) so a site specific analysis should be done as part of this natural gas analysis, and consideration of additional alternatives or mitigation measures (such as prohibition of gravel causeways) should be evaluated. Both the trenching of the pipeline during construction, scouring that exposed the pipeline and resulted in a spill such as recently happened in the Yellowstone River, and causeway construction and long-term operation could have significant impacts on water quality, Essential Fish Habitat, and other threatened or endangered species habitats.

The revised draft SEIS fails to analyze a range of natural gas production alternatives and the possibility of LNG transport via tankers without providing supporting economic or other justification citations. The draft SEIS also fails to evaluate the impacts of different

pipeline landfall locations with respect to impacts to subsistence resources and activities, threatened and endangered species impacts, ice conditions such as in the Chukchi Polynya and how this may affect integrity of pipeline operations including leak detection, adequate burial of pipelines if trenched (note the impacts from Exxon's recent Yellowstone River spill⁷), and climate change impacts to shoreline erosion and permafrost melt at the shoreline transition zone for the pipeline. Furthermore, the analysis failed to address the cumulative impacts to coastal and terrestrial resources of Kasageluk Lagoon and to tundra wetland environments within the National Petroleum Reserve-Alaska.

We had expected that the revised Draft SEIS would have revised the flawed analyses of missing information or the effects of natural gas development contained in the first draft SEIS (Original Draft Supplement) in October, and also the consideration of alternatives.

Instead, the Draft SEIS contains 98 pages (Appendix A) which simply list MMS's identified scientific data gaps, and then explain why it is not necessary to address them. Quite simply, the government still has not corrected the error of not having an adequate scientific baseline, as required by the OCSLAA, upon which to base its leasing decision and upon which it can evaluate post-leasing exploratory impacts including planned drilling.

We do know that America's Arctic Ocean is an integral part of life in Arctic coastal communities; that it supports iconic wildlife species; that it helps regulate the planet's weather and climate; and that it is changing rapidly. However, scientists know very little about how the Arctic Ocean functions or the ways in which this fragile marine ecosystem that is increasingly stressed by climate change might respond to industrial oil and gas activities. There is significant missing information about even the most basic parameters for every one of the largest and most conspicuous animals in this ecosystem—including all fish, marine mammals, and birds—which are typically the most studied animals in an ecosystem.

Ironically, the same day as the public hearing in Fairbanks, the new report by the U.S. Geological Survey (USGS) was released (*An Evaluation of the Science Needs to Inform Decisions on OCS Energy Development in the Chukchi and Beaufort Seas, Alaska*).⁸ Yet even though USGS is also within the Interior Department, like BOEMRE, there was no mention of this concurrent review in the EIS, nor any plans to incorporate its findings.

The report is a culmination of a year-long study by USGS designed specifically to analyze data gaps and research needs for the Arctic Ocean in connection with oil and gas activities in the region.⁷ It confirms that critical questions, particularly about which areas of the Chukchi Sea

⁷ <http://billingsgazette.com/special-section/news/oil-spill/>

⁸ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011. An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370.

⁷ In May 2010, Secretary Salazar cancelled the remaining Arctic Ocean leases in the 2007-2012 Five Year OCS Leasing Program, stating "that the country must take a cautious approach in the Arctic, and gather additional scientific information about resources, risks, and environmental sensitivities before making decisions about potential future lease sales in frontier areas." Department of the Interior, Fact Sheet, A Comprehensive, Science-Based

are important to the species that inhabit the region and how and when they use those areas, remain unanswered because of a lack of scientific data. "The Arctic environment is highly variable both physically and biologically," but scientific understanding of those differences is not well developed, which serves as a "major constraint to a defensible science framework for critical Arctic decision making."⁸

The USGS report demonstrates the inadequacy of BOEMRE's current approach to analyzing missing information and the indefensible nature of the agency's conclusion that no information essential to the lease sale decision is missing. In light of the USGS report, the Interior Department must fundamentally reconsider its approach. The agency cannot satisfy its stewardship obligations under the law in light of missing information, and it cannot make good decisions about whether and how to proceed with activities in the Arctic Ocean like Lease Sale 193.

We provide a few examples of the highly relevant USGS report conclusions, such as that "the effects of climate change are anticipated to influence all components of the Arctic ecosystem, and the Arctic OCS energy activities may exacerbate those changes, unless careful analysis of risks and tradeoffs is conducted." (p. 217). This is not reflected in the Chukchi Sea leasing analysis or decision.

The USGS also noted that "although portions of the Chukchi and Beaufort Seas are expected to be ice-free for a greater period of time each year, the pack ice is predicted to be more dynamic at certain times, increasing the risk of accidents and making oil-spill response more difficult during these times." (p. 217-218). Some imagine the ice-free summer Arctic Ocean flat calm like a bathtub, not the increasingly unpredictable place it is today and is expected to be in the future. On the day of the Fairbanks hearing, an elder from Barrow sent an e-mail that climate change impacts were very evident that day, as the sea ice had made travel by residents difficult because it was slammed high along the coast. The revised draft SEIS provides a bit more generalized information about sea ice melt, but does not evaluate how sea ice conditions have changed throughout the different areas of the lease sale area, including within the Chukchi Polynya, over the biologically important Hannah Shoal, and how such changes could affect both biological impacts and risks to exploratory and production platforms.

Fairbanksans are quite familiar with the comprehensive ecological and oceanographic baseline studies conducted in the 1970's and early 1980's under the auspices of the OCSEAP program largely managed by NOAA. Many of today's best known University of Alaska Fairbanks professors of marine and coastal research, including emeritus, cut their teeth in that program. While MMS still conducted scattered studies after the OCSEAP program was disbanded during the Reagan Administration, the later studies were rarely knit together in the same geographically broad and ecological complex way with interdisciplinary projects as had been

Offshore Energy Plan at 2 (May 27, 2010). He directed the USGS to conduct an evaluation of scientific needs in the region "[t]o better understand the resilience of Arctic coastal and marine ecosystems to potential OCS resource extraction activities." *Id.*

⁸ USGS Report at 151.

carried out during OCSEAP. We support the conclusions laid out by the recent USGS review and in light of the phenomenal environmental changes that have taken place since the OCSEAP program that USGS raised, a new, comprehensive program needs to be established and is legally necessary. This time it should take into account traditional ecological knowledge from a well-supported tribal consultative effort that involved studies guided by affected tribal entities (not corporations).

Ironically, each year in the Alaska Region's Annual Study Plan,⁹ the agency identifies why dozens on ecological, oceanographic, and other studies must be done in order to support NEPA analyses, and the federal government spends millions of dollars on these studies.

We note that the MMS's hastily designed COMIDA studies plan was highly focused on drilling locations and the studies were even started prior to the leasing decision or prior to post-leasing seismic surveys, nor did it address the comprehensive information needed to provide adequate pre-leasing and post-leasing information that OCSLAA requires.

But it is inconceivable that NONE the information that scientists have collected since the flawed FEIS (2007) in the past five years under the Annual Studies plan was published were found to be relevant to the environmental impact analyses for the revised draft SEIS. While it was not collected as part of the necessary comprehensive baseline framework as USGS data gaps report as suggested is necessary, it is blatant disregard for the scientific endeavors that have been carried out and for which results have been published, as well as a basic waste of the taxpayers' funds to have ignored the more recent results even to evaluate their sufficiency in meeting the baseline science information requirements.

In conclusion, this revised draft SEIS still did not address a single data gap among hundreds it noted about the marine and coastal ecosystem. The Interior Department should recognize that there is missing information about the Chukchi Sea that is essential to the lease sale decision, as we stated in our November 30 comments.

The intervening USGS report now further compels that conclusion and so the Interior Department should rescind the Revised Draft SEIS, obtain missing information that is essential, and prepare a new supplement that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193. Short of extending the remand period, the agency should explore alternatives that allow it to maintain the status quo on Lease Sale 193 leases while it obtains essential missing information, for example, by deciding to continue the suspension of some or all of the leases pending further research and analysis to inform future decisions about whether, where, and how to implement the leases.

Finally, there still is not proven technology to clean up oil spilled amid the Arctic's broken sea ice and extreme weather and where emergency response equipment is hundreds of miles away and the Coast Guard is 1,000 miles away. It is not responsible to move forward with risky plans

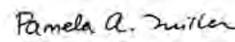
⁹ <http://alaska.boemre.gov/essp/sp2011.pdf>

to drill in these bountiful waters until proven response capabilities are in place to clean up an oil spill. **As the Deepwater Horizon spill demonstrated, rushing ahead without adequate information can have tragic and irreversible consequences.**

Before the Interior Department considers any drilling in the Arctic Ocean, such as Shell Oil's plans to drill 10 wells in the Beaufort and Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling. Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot make informed decisions about leasing drilling in the Arctic's Chukchi and Beaufort Seas and should not approve drilling plans.

Thank you for this opportunity to comment.

Sincerely,

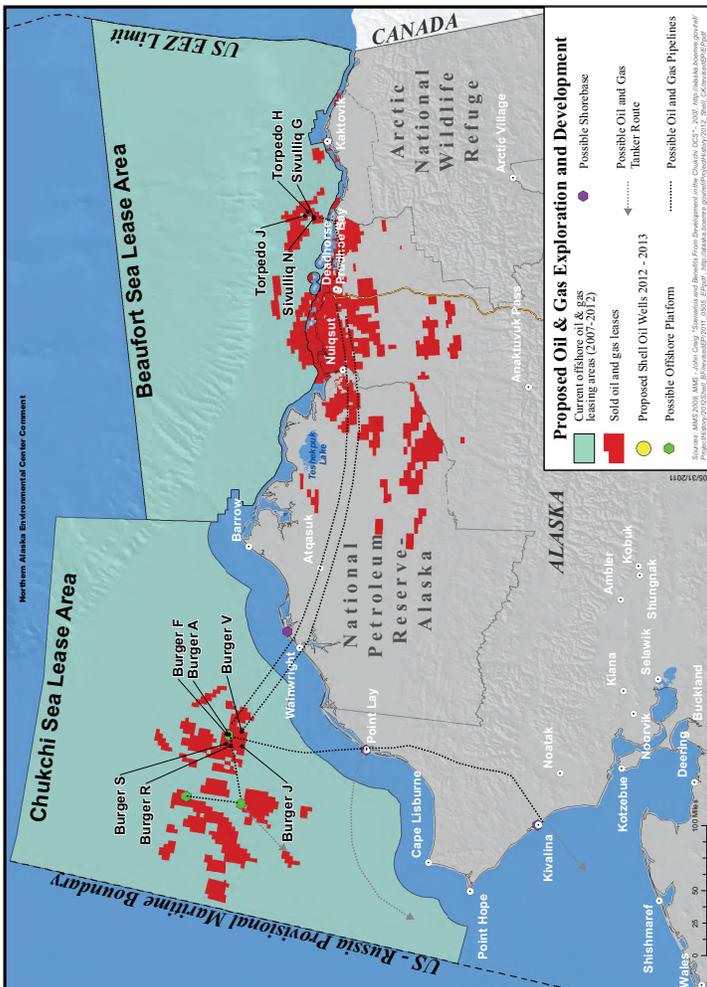


Pamela A. Miller
Arctic Program Director

Attachments:

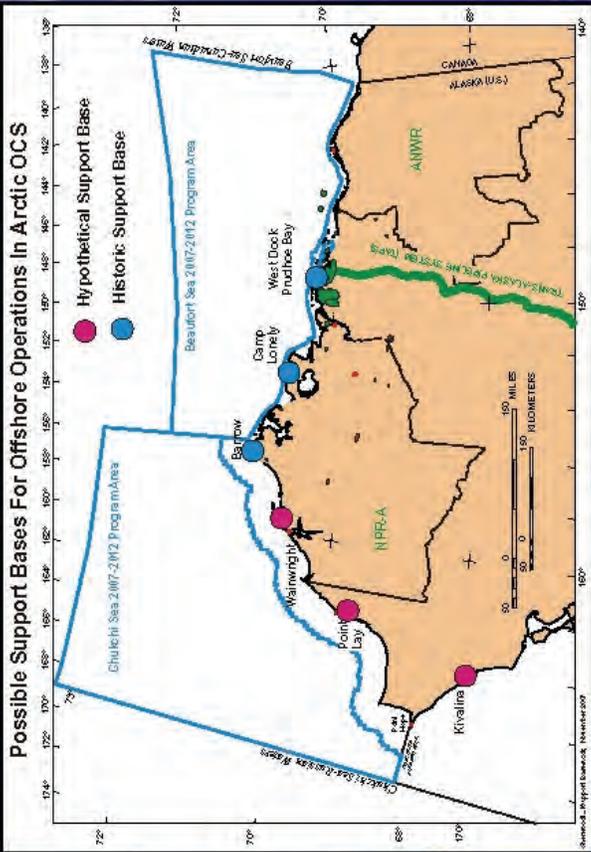
Scenarios and Benefits from Development in the Chukchi Sea, James Craig, MMS, 2007

Proposed Offshore Oil and Gas Exploration and Development, 2011,
<http://northern.org/media-library/maps/arctic/arctic-ocean-maps/arctic-ocean-leases-proposed-shell-oil-drilling-2012-2013/view>



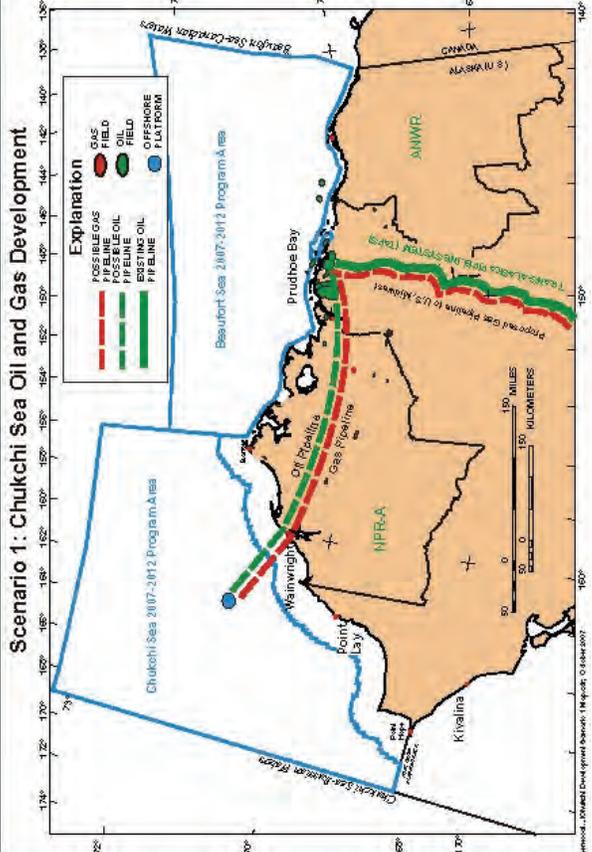
Northern Alaska Environmental Center Comment
Scenarios and Benefits from Development in the Chukchi OCS
 James Craig
 Minerals Management Service

Possible Support Bases For Offshore Operations in Arctic OCS



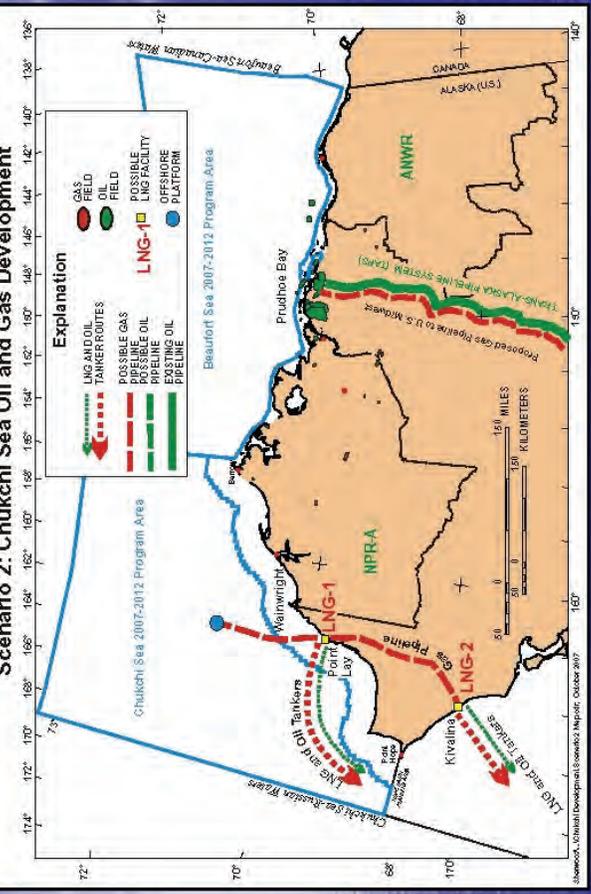
The program areas shown on this map do not necessarily represent actual sale areas in the 2007-2012 OCS schedule.

Scenario 1: Chukchi Sea Oil and Gas Development



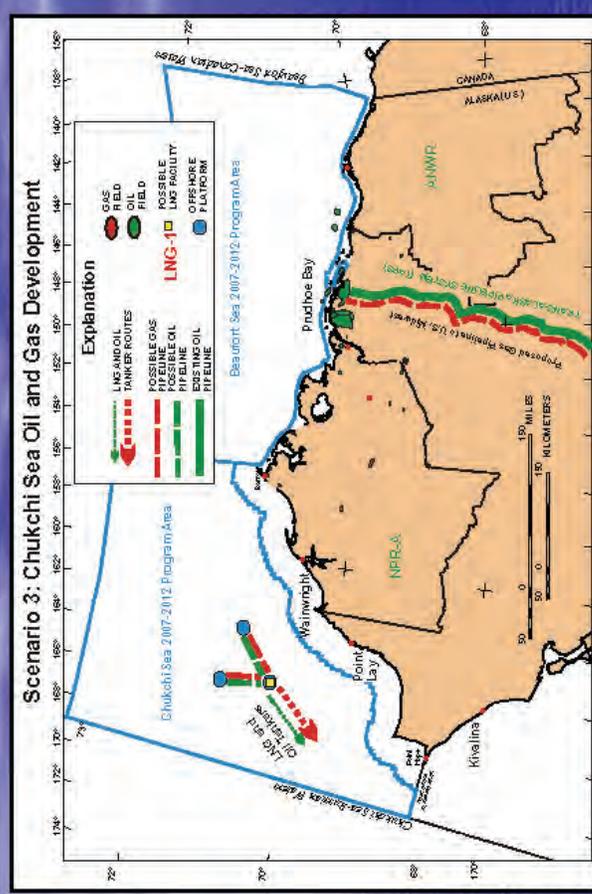
The program areas shown on this map do not necessarily represent actual sale areas in the 2007-2012 OCS schedule.

Scenario 2: Chukchi Sea Oil and Gas Development



The program areas shown on this map do not necessarily represent actual sale areas in the 2007-2012 OCS schedule.

Scenario 3: Chukchi Sea Oil and Gas Development



The program areas shown on this map do not necessarily represent actual sale areas in the 2007-2012 OCS schedule.



July 11, 2011

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Re: Chukchi Sea Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement, OCS EIS/EA BOEMRE 2010-034

Dear Dr. Kendall:

Thank you for considering these comments on the revised draft supplemental environmental impact statement for Chukchi Sea Lease Sale 193 (Revised Draft Supplement). See 76 Fed. Reg. 30956 (May 27, 2011). In addition to this letter, you have received individual comments from more than 20,000 Oceana members and supporters. As each of these comments and our previous letters make clear, there is substantial missing scientific information about the Chukchi Sea that is essential to the lease sale decision, and there is no demonstrated way to respond effectively to a spill in Arctic conditions. The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has the opportunity to move forward by implementing comprehensive research and monitoring, which should include the identification of important ecological areas. Rather than taking this opportunity in the Revised Draft Supplement, BOEMRE has continued to ignore missing information and to justify a decision made without good science or planning. BOEMRE must rescind the Revised Draft Supplement, obtain essential missing information, and prepare a new environmental impact statement (EIS) that adequately informs its decision whether to cancel, modify, or affirm Lease Sale 193.

Missing scientific information is at the heart of the ongoing controversy about decisions to allow offshore oil and gas activities in the Chukchi Sea. The Revised Draft Supplement is now BOEMRE's second effort to satisfy a court order invalidating the EIS prepared for Lease Sale 193.¹ Lease Sale 193 was held pursuant to the original 2007-12 Five-Year Leasing Program, which was invalidated because the environmental sensitivity of offshore areas had not been properly evaluated or considered.² In addition to courts, communities, scientists, the National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling, and, most recently, the U.S. Geological Survey (USGS) have all recognized the urgent need to gather missing scientific information to help guide decisions about industrial activities in the Arctic. In particular, the USGS concluded that "[t]here is a continuing need to facilitate the collection, integration, and sharing of multi-scale data sets to advance our understanding of the Arctic as a complex, interdependent system.

¹ See *Native Vill. of Point Hope v. Salazar*, 730 F.Supp.2d 1009 (D. Alaska 2010).

² See *Ctr. for Biological Diversity v. U.S. Dep't of the Interior*, 563 F.3d 466 (D.C. Cir. 2009).

Comments on Revised Draft Supplemental EIS for Lease Sale 193
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Such multidisciplinary data sets need to be used to develop comprehensive, holistic approaches to resource development and impact scenarios to inform planning.³

The lack of baseline information creates a significant impediment to both effective planning and preparedness. The recently adopted national ocean policy recognizes the need for basic scientific information to make wise decisions.⁴ In addition, this understanding is essential for the government to comply with statutory and regulatory mandates that were established to help ensure responsible stewardship of resources, including the Outer Continental Shelf Lands Act, National Environmental Policy Act, Endangered Species Act, and Marine Mammal Protection Act.

The most effective way to respond to the courts' orders and prepare for decisions about future industrial activities is to undertake a comprehensive research and monitoring program that would provide a fundamental understanding of the marine ecosystem. The recent USGS Report found that "a collaborative and comprehensive Arctic science planning process would bring great value to the decisions required to proceed with development of oil and gas and other strategic assets in the Arctic in a changing climate environment."⁵ A collaborative science planning process should include guidance and input from local communities, and it is all the more important to ensure that this occurs given the recent termination of Alaska's Coastal Zone Management Program.

A focus of this research and monitoring program should be the identification and protection of important ecological areas (IEAs). IEAs are geographically delineated areas which by themselves or in a network have distinguishing ecological characteristics, are important for maintaining habitat heterogeneity or the viability of a species, or contribute disproportionately to an ecosystem's health, including its productivity, biodiversity, function, structure, or resilience. Identifying IEAs and implementing the protections needed to maintain their roles in the ecosystem should be a first step in determining whether industrial activities should proceed and, if so, under what conditions.

In the Lease Sale 193 area, there is not sufficient spatial and temporal information to identify all of the IEAs and the protections needed. Based on the available western science and Local and Traditional Knowledge, some areas can already be identified. Hanna Shoal and the area surrounding it stands out as a likely IEA. The following information indicates that Hanna Shoal and surrounding area is likely an IEA:

³ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370, 220 (hereinafter "USGS Report").

⁴ 3 Exec. Order No. 13547, 75 Fed. Reg. 43023 (2010); Council on Environmental Quality, Final Recommendation Of The Interagency Ocean Policy Task Force (July 2009) at 6, 39-40, available at http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf. See also U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century* 374 (2004), available at <http://www.oceancommission.gov>.

⁵ USGS Report at 221.

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- Sea ice generally lingers longer in summer in this area than in others in the region;⁶
- Benthic feeding marine mammals, such as walrus and gray whales, have been known to use the area for feeding;⁷
- It may be a key feeding area for Ivory Gulls;⁸ and
- Recent studies indicate that water currents slow in the region, which may account for the longer lingering sea ice, and which may lead to heightened deposition of detritus and enhance filter feeder habitat and growth.⁹

This combination of features is likely to make the region increasingly important in light of the rapid climate changes that are occurring in the region, including the loss of summer sea ice. Further studies are needed to delineate the importance of Hanna Shoal and surrounding areas to the health of the Chukchi Sea.

As an IEA, protection measures should be implemented for Hanna Shoal to prevent it from being degraded. These management measures should be tailored to maintain Hanna Shoal's important contribution to ecosystem health and must consider not only activities within the greater Hanna Shoal area, but also activities outside of the area that may affect its importance and health. For example, if walrus are travelling to and from large beach haulouts near Point Lay to Hanna Shoal, which appears to be the case, measures should be put in place to ensure that travel is not affected.

We are just learning that Hanna Shoal is an IEA. Unfortunately our spatial and temporal understanding of the region is currently insufficient to identify the other IEAs in the lease sale area and the protections needed. This information is necessary to complete the Lease Sale 193 EIS and to guide decisions about whether industrial activities can be conducted in a way that does not harm ecosystem health, and if so, under what conditions.

As a first step, BOEMRE must rescind the Revised Draft Supplement, obtain essential missing information, and prepare a new EIS. We look forward to continuing to work with you on this important issue.

Sincerely,

Susan Murray
Senior Director, Pacific

⁶ See Smith, M.A. et al., *Arctic Marine Synthesis, Atlas of the Chukchi and Beaufort Seas* (Audubon-Alaska in cooperation with Oceana) 2-11 (2010) (hereinafter "Arctic Synthesis").

⁷ See, e.g., USGS, Walrus radio-tracking in the southern Chukchi Sea 2010, available at <http://alaska.usgs.gov/science/biology/walrus/tracking.html>; Moore, S.E. et al., *Cetacean habitat selection in the Alaskan Arctic during Summer and Autumn*, 53 Arctic 432, 438 (2000).

⁸ See Arctic Synthesis at 5-29.

⁹ See *id.* at 2-11; Alaska Marine Science Symposium, *Book of Abstracts* 21 (2010), available at <http://doc.nprb.org/web/symposium/2010/2010%20AMSS%20Abstract%20Book.pdf>.

Ocean Conservancy and PEW Environment Group Comments

OCEAN CONSERVANCY

PEW ENVIRONMENT GROUP

July 11, 2011

VIA ELECTRONIC DELIVERY

Dr. James Kendall
Regional Director
BOEMRE Alaska OCS Region
3801 Centerpoint Dr. Ste 500
Anchorage AK 99503-5820

Re: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director Kendall:

The Pew Environment Group and Ocean Conservancy submit the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) revised draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (revised draft SEIS).¹

I. Introduction

Since it was first proposed in 2005, Lease Sale 193 has been the subject of significant concern and controversy, including litigation that resulted in a remand order from the Alaska Federal District Court in *Native Village of Point Hope v. Salazar*.² BOEMRE's initial response to the court's remand order—the draft SEIS released in September 2010—did not address adequately the shortcomings identified by the court. The addition of a very large oil spill (VLOS) analysis in the revised draft SEIS, while an improvement, does not remedy the serious deficiencies of the original draft SEIS. We refer BOEMRE to our November 2010 comment letters and incorporate by reference all the information contained in those letters.³

The following comments provide additional information relevant to BOEMRE's new VLOS analysis and underscore the deficiencies of BOEMRE's missing information analysis. To make responsible decisions, BOEMRE needs to better understand the environmental and social consequences of development and plan accordingly. The revised draft SEIS states that, at the end

¹ 76 Fed. Reg. 30956 (May 27, 2011).

² *Native Village of Point Hope v. Salazar*, No. 1:08-cv-0004-RRB (D. Alaska Aug. 5, 2010) (amended order remanding to agency).

³ See Pew Environment Group, Comments Re: Chukchi Sea Lease Sale 193 Draft Supplemental Environmental Impact Statement (Nov. 29, 2010) (attached as Appendix 1); Conservation Coalition, Comments Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (Nov. 30, 2010) (attached as Appendix 2).

of the remand process Secretary Salazar must decide whether to “reaffirm, modify, or cancel the Department’s previous decision on Sale 193.”⁴ Given the shortcomings of the revised draft SEIS and the significant threats to the environment revealed by the VLOS analysis, we urge Secretary Salazar not to affirm the previous decision. If the Secretary chooses to affirm the previous decision, he should modify that decision to better protect the key areas that are especially important for wildlife or for subsistence purposes, including the sixty-mile offshore corridor and Hanna Shoal. In addition, the Secretary should suspend oil and gas operations⁵ on any remaining Chukchi leases until:

- BOEMRE evaluates the findings from the June 23, 2011 U.S. Geological Survey (USGS) report and produces a clear, coherent strategy for gathering information necessary to determining whether, where, when and how oil and gas activities can occur;
- A comprehensive, integrated research and monitoring plan is in place that will provide the information necessary to make informed decisions regarding oil and gas activities in the Chukchi Sea;
- BOEMRE develops and implements a plan to protect areas that are important for their ecological and subsistence values; and
- There is demonstrated capacity to contain and effectively respond to a blowout in the specific arctic conditions where activities are planned.

II. BOEMRE’s new VLOS analysis is unclear and fails to provide meaningful information about the risks of a blowout scenario.

The major change in the revised draft SEIS from the original draft SEIS is the inclusion of a new VLOS analysis. By including this analysis BOEMRE acknowledges for the first time that a VLOS is a reasonably foreseeable possibility. Unfortunately, the VLOS analysis in the revised draft SEIS is unclear and fails to provide the level of information necessary to inform decisions about if, when, where, and how to lease. Moreover, the VLOS analysis does not consider adequately the significant limitations of oil spill response in the Chukchi Sea.

According to BOEMRE, the trajectory analysis at the heart of the VLOS analysis is designed to provide an estimate of “where very large oil spills might travel on the ocean’s surface and what land segments and biological, social, and economic resources might be contacted.”⁶ BOEMRE’s model, however, appears to assume that oil travels in a simple path, and stops upon contacting the shoreline. This approach ignores the very real likelihood of oil spreading along the coastline. Moreover, the narratives, figures, and tables presented in the revised draft SEIS and in Appendix B fail to describe meaningfully the potential impacts to specific areas of the ocean and coast. As a result, the analysis does not provide the level of information necessary to support decisions about whether, when, where, and under what conditions oil and gas drilling activities might occur.

The revised draft SEIS also fails to address adequately the difficulty of responding to a VLOS many miles offshore in the middle of the remote Chukchi Sea where environmental conditions

⁴ See, e.g., Revised Draft SEIS at 3.
⁵ See 30 C.F.R. § 250.168 (authorizing BOEMRE to suspend operations on OCS leases); see also *id.* § 250.172.
⁶ Revised Draft SEIS, Appendix B, at B9.

are challenging, as yet not fully understood, and the necessary infrastructure to support a major spill response does not exist. Moreover, in most cases, the Arctic operating environment reduces the effectiveness of oil spill control and recovery methods and equipment. For example, the presence of sea ice can clog skimmers, interfere or tear boom, and hinder responder’s access to the oil. While the industry and spill responders continue to research cleanup methods in Arctic waters, there is virtually no real-world experience with such incidents. Most of the research to date has been in the laboratory or in small-scale trials where there are far fewer variables than in the Arctic offshore environment. The inability to remove oil from the ecosystem is likely to exacerbate the significant impacts of a VLOS.

Despite the significant shortcomings in the VLOS analysis, it clearly acknowledges that a VLOS could have catastrophic impacts on most species, habitat and coastal communities. Specifically, BOEMRE concludes that a VLOS “could cause significant adverse environmental impacts to most of the examined environmental resources in the Chukchi Sea region,” that “some vulnerable animal populations could suffer lasting, population-level impacts under certain circumstances,” and that “[l]ongterm reductions in local animal populations would exacerbate disruptions to subsistence-harvest patterns and displacement of sociocultural systems.”⁷

Given the acknowledgement of potentially severe environmental impacts, BOEMRE and Secretary Salazar should consider this new information carefully—especially in light of the significant limitations on the ability to respond to a VLOS in Arctic conditions—and reassess the previous Lease Sale 193 decision. In addition, BOEMRE should prepare a site-specific environmental impact analyses that include potential blowouts and trajectory models for any proposed exploration drilling.

III. BOEMRE’s revised draft SEIS fails to address significant shortcomings with respect to missing information.

We acknowledge that government agencies, academic institutions, and industry have conducted and continue to conduct research in the Chukchi Sea. These studies are important and contribute to our baseline knowledge and understanding of the Chukchi Sea ecosystem. However, the existence of a large body of individual studies does not mean that the research is sufficient to raise the level of understanding of the Chukchi Sea to the point that decisions about whether, where, when, and how oil and gas activity should occur in the Chukchi Sea are fully informed. Despite all the research that has been conducted in the Chukchi Sea, the BOEMRE’s NEPA analysis is still riddled with admissions of missing and incomplete information.

Unfortunately, the analysis of missing information set forth in BOEMRE’s revised draft SEIS is not significantly different from the analysis in the original draft SEIS, and the revised draft SEIS remains inadequate. We refer BOEMRE to our November 2010 comment letters and incorporate by reference all the comments contained in those letters.⁸ The following comments supplement our original comment letters with respect to BOEMRE’s missing information analysis, address

⁷ Revised Draft SEIS at 282.
⁸ See Pew Environment Group, Comments Re: Chukchi Sea Lease Sale 193 Draft Supplemental Environmental Impact Statement (Nov. 29, 2010) (attached as Appendix 1); Conservation Coalition, Comments Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (Nov. 30, 2010) (attached as Appendix 2).

the new science report recently released by the USGS, and recommend implementation of a holistic science plan for the Arctic.

A. BOEMRE’s missing information analysis remains inadequate.

The Alaska Federal District Court’s remand order instructed BOEMRE to revise its analysis of missing information pursuant to NEPA regulations at 40 C.F.R. § 1502.22.⁹ Instead of taking seriously its obligation to make a decision informed by science and gathering missing scientific information, BOEMRE opted to undertake a paper exercise, cataloging the statements in the SEIS regarding missing information and concluding that none of the missing information is essential to a reasoned choice among alternatives. That conclusion is not valid, and is not consistent with the Department of Interior’s commitment to science-based decision-making.

As our previous comments explain, much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, where, and under what conditions to offer oil and gas leases in the Chukchi Sea. Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread across the Chukchi Sea, and this lack of information has been widely acknowledged.¹⁰ BOEMRE tries to brush aside the need for this missing information by saying that all alternatives considered in the EIS will result in significant impacts to the environment and thus the information is not necessary to a choice among the alternatives. However, the agency can’t just make a sweeping statement that harm will occur. It must provide sufficient information about the types and extents so that decisions can be made as to the relative extent of the harms between the alternatives and so that the agency can take measure to limit that harm.

B. BOEMRE must incorporate the findings of the recently released USGS report.

Secretary Salazar has recognized that “sound scientific information” is needed “to develop energy resources in the right places and the right ways.” As a result, in April 2010, he tasked the USGS with completing “a special review of information that is known about the Beaufort and Chukchi Sea.” Specifically, the Secretary asked USGS to:

examine the effects of exploration activities on marine mammals; determine what research is needed for an effective and reliable oil spill response in ice-covered regions;

⁹ When an EIS discloses incomplete or unavailable information relevant to a foreseeable significant adverse effect, a federal agency must determine whether the missing or incomplete information is “essential to a reasoned choice among alternatives.” 40 C.F.R. 1502.22. If so, and if “the overall costs of obtaining [the missing information] are not exorbitant, the agency shall include the information in the environmental impact statement.” *Id.*
¹⁰ See, e.g., Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370; Coastal Response Research Center, 2010, Natural Resources Damage Assessment (NRDA) in Arctic Waters: The Dialogue Begins. University of New Hampshire, Durham, MBC 2007. Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area OCS Study MMS 2007-002, at 49-50, prepared by MBC Applied Environmental Sciences, Costa Mesa, CA for the U.S. Dept. of the Interior, Minerals Management Service, Alaska OCS Region.

evaluate what is known about the cumulative effects of energy extraction on ecosystems and other resources of interest; and review how future changes in climate conditions may either mitigate or compound the impacts from Arctic energy development.

In June 2010, the Secretary released the USGS report, “An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska.”¹¹ The USGS report, in combination with the National Research Council’s report in 2003 on “Cumulative Environmental Effects of Alaskan North Slope Oil and Gas Activities,”¹² represent the best and most comprehensive evaluations of information available—as well as information needed but not known—in support of decisions about oil and gas activities in the Arctic.

Much of the USGS report can be boiled down to the following statements:

Our analysis of the many different literature sources—scientific reports, public policy documents, workshop findings, web sites—and discussions with a diverse range of stakeholders has resulted in a recognition that in recent years there has been a concerted effort to obtain more data and information on and conduct more research in the Arctic, so there is a great deal of information existing about the Arctic. *Yet, in many ways, relatively little is known about the Arctic* in large part because many of the studies are targeted in focus and independently conducted with limited synthesis, even within studies on the same topics. There is a critical need for large-scale synoptic efforts that synthesize the many different studies on the full range of topics by the numerous researchers and organizations examining the Arctic. However, there also is a need for some very specific research to address the identified science gaps (in the previous chapters, specifically, and here in general).¹³ (emphasis added)

Even a cursory reading of the USGS report indicates that it is directly relevant and highly applicable to the decisions at hand on Lease Sale 193. BOEMRE should review the new USGS report closely and incorporate the report’s findings into the final SEIS. In addition, BOEMRE should incorporate the findings of the USGS report into future decisions about this lease sale, as well as environmental analyses, permit applications, and other processes associated with future Chukchi leases, if any.

Some people believe that there is sufficient science to justify oil and gas activity in the Chukchi and Beaufort seas at this time. For others, there never will be enough science. Our organizations do not support either extreme, nor should BOEMRE. Instead, BOEMRE should undertake a careful evaluation of USGS’s findings, the NRC report on cumulative impacts, and other sources

¹¹ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370.
¹² National Research Council, 2003, Cumulative environmental effects of oil and gas activities on Alaska’s North Slope. Washington: National Academies Press.
¹³ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370, at 218.

of information and should develop a clear, coherent strategy for gathering necessary information and conducting appropriate analyses to address key management decisions regarding activity in the Arctic Outer Continental Shelf (OCS).

The Pew Environment Group, Ocean Conservancy, and others are working with a group of scientists to review the new USGS report and identify priority actions with regard to research, monitoring, and synthesis, to advance our understanding of Arctic marine ecology with respect to OCS activity. This effort will be relevant to Lease Sale 193 and other decisions in the Chukchi and Beaufort Seas. We will share the results of this review with BOEMRE when it is completed later this summer.

C. BOEMRE should develop and implement an integrated, holistic science plan.

To adequately address the issue of missing information, BOEMRE must develop and implement an integrated, holistic science plan for the Arctic Ocean. Existing scientific studies in the Chukchi Sea have been undertaken in an uncoordinated basis without an overarching purpose for the information or a clearly identified goal to advance knowledge of Chukchi Sea ecosystems and provide information directly relevant to decisions regarding oil and gas activities. Specifically, many of the current scientific studies are focused on specific drilling lease sites that are of interest to industry. They provide information about physical and biological aspects for a small area within a larger ecosystem for a limited time period. To be useful to leasing decisions, however, longer-term studies must be undertaken to provide an understanding of the variability of species over time.

Similarly, BOEMRE's current approach to science—as demonstrated in the agency's Environmental Studies Program Annual Study Plan—is not adequate. Narrow studies are undertaken by contractors responding to a request for proposal with no coordinated analysis and synthesis of that information. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea. This need for synthesis and purpose was highlighted in the recent USGS report.¹⁴

To address these problems, BOEMRE—in conjunction with local, state, and federal partners—must develop and implement comprehensive, integrated research and monitoring plan for the U.S. Arctic. Such a plan should be designed to improve our understanding of Arctic marine ecosystem structure and functioning and to avoid adverse impacts on the Arctic environment and subsistence way of life. It should: (1) define existing information and research needs through a comprehensive gap analysis (the USGS review was a first step in this process); (2) gain a more comprehensive catalog of species, populations and habitats (including seasonal migrations) in a marine life assessment; (3) track the physical factors that influence and determine biological productivity, habitat preference and migration pathways in an integrated, comprehensive environmental monitoring program; (4) secure a better understanding of ecosystem interactions and trophic linkages and the effects of human activity; and (5) integrate scientific data to identify processes and habitats that are sensitive and vulnerable to disruption.

¹⁴ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011. An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370, at 218.

IV. If Secretary Salazar affirms Lease Sale 193, he should adopt a modified alternative that protects important ecological areas, including the sixty-mile offshore corridor and Hanna Shoal.

If Secretary Salazar opts to affirm Lease Sale 193, he should adopt a modified alternative that better protects key areas that are especially important for wildlife or for subsistence purposes.¹⁵ Specifically, the Secretary should adopt an alternative that excludes known important ecological areas (IEAs)—and buffer zones sufficient to ensure the protection of these areas—from the Chukchi Sea lease sale.

The concept of protecting the most ecologically important regions of the ocean is not new. Norway, for example, has undertaken a thorough planning process that includes the identification of areas that are important to the ecological functioning of the Barents Sea ecosystem. Norway's forthcoming update of the 2006 integrated management plan for the Barents Sea—Lofoten Area provides an example of how to protect important areas of the offshore environment. The updated plan will protect ecologically sensitive areas like the important fish spawning areas in the Lofotens, and the marginal ice zone and the polar front, which is an oceanographic feature important to the healthy functioning of the Barents Sea.¹⁶

BOEMRE should map and identify IEAs as part of the comprehensive Arctic science plan described above. In the mean time, however, there is sufficient information to identify and protect at least two IEAs in the Chukchi Sea: the 60-mile offshore corridor and Hanna Shoal.¹⁷

(1) 60-Mile Offshore Corridor

Subsistence hunting in the marine environment is vital to Arctic coastal communities. Hunters take bowhead and beluga whales, ringed and bearded seals, walrus, polar bears, seabirds, and fish. The use areas for these species, the travel routes to and from harvest locations, and the areas used when searching for animals all cover large areas of the sea. With changes in technology (e.g., more powerful outboard engines and boats capable of longer trips) and changes in the environment (e.g., loss of summer sea ice), subsistence use areas have been expanding in recent decades, particularly offshore. In 1979, one researcher found that lifetime subsistence use areas

¹⁵ Cf. Dep't of Commerce, Nat'l Oceanic and Atmospheric Admin, Nat'l Marine Fisheries Serv., Comments Re: Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Draft Supplemental Environmental Impact Statement (Draft SEIS) for the Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 in the Chukchi Sea. (Feb. 28, 2011), at 6 (“The Draft SEIS does not examine the effects of natural gas development and production on any unique habitat areas, such as Hanna Shoal, which are present in the lease sale area. It is important for other agencies and the public to understand what special areas may be present, how they function in the ecosystem, and how they may be impacted.”).

¹⁶ Anon, St.meld.nr. 8 (2005–2006) Helhetlig forvaltning av det marine miljø i Barentshavet og havområdene utenfor Lofoten (forvaltningsplan). Ministry of Environment, Oslo (2006) (available in English from the Norwegian Ministry of Environment).

¹⁷ As scientists learn more about Chukchi Sea ecosystems, it is almost certain that additional IEAs will be identified. In the future, BOEMRE should use its authorities to protect any newly-identified IEAs.

in Barrow extended ten to twenty miles offshore.¹⁸ Thirty years later, researchers found that bowhead hunting areas extended over forty miles from shore, and walrus hunting took Barrow hunters more than fifty miles from shore.¹⁹ Similar results have been found in Wainwright, with seal and walrus hunting extending well over forty miles from shore, and a marked expansion of hunting area between the 1970s and the late 1980s.²⁰ Given these documented subsistence use areas, a twenty-five mile buffer zone along the coast is insufficient to protect current subsistence hunting. Removing the sixty-mile corridor from the leasing program, as recommended by NOAA,²¹ would better protect current use areas and avoid disturbance of marine mammals at the outer edge of the use areas. If current trends continue, future subsistence use may extend even farther offshore. Further, NOAA's February 28, 2011 comments on the original draft SEIS detail the importance of protecting the benthic habitats, nearshore estuarine habitats, marine mammals and subsistence resources in the sixty-mile corridor from leasing, exploration and development.

(2) Hanna Shoal

Hanna Shoal's physical factors contribute toward the persistence of sea ice, which is an important substrate for marine mammals like walrus. During a time of rapid change, Hanna Shoal appears to be an important sea ice area over the long term. This shallow area diverts warm water masses flowing northward from the Bering Sea, holding colder water long into the summer season.²² As a result, sea ice persists there longer into the season, as well.²³ A pack ice feature near Hanna Shoal called Post Office Point was historically a meeting point known for its reliable ice all summer long. The area was given its name because ships would meet at this dependable location to exchange mail and information at sea.²⁴ Recent warming has changed the structure of

¹⁸ Pedersen, S. 1979. Regional Subsistence Land Use, North Slope Borough, Alaska. Occasional Paper No. 21, Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska, Fairbanks, Alaska and Conservation and Environmental Protection, North Slope Borough, Barrow, Alaska.

¹⁹ Stephen R. Braund & Associates. 2010. Subsistence Mapping of Nuiqsut, Kaktovik, and Barrow. Prepared for United States Department of the Interior Minerals Management Service, Alaska OCS Region, Environmental Studies Program, Anchorage, Alaska.

²⁰ See, e.g., Pedersen, S. 1979. Regional Subsistence Land Use, North Slope Borough, Alaska. Occasional Paper No. 21, Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska, Fairbanks, Alaska and Conservation and Environmental Protection, North Slope Borough, Barrow, Alaska. Stephen R. Braund & Associates (SR&A), and Institute of Social and Economic Research (ISER), 1993. North Slope Subsistence Study: Wainwright, 1988 and 1989. Prepared by S.R. Braund and Associates and Institute of Social and Economic Research, University of Alaska, Anchorage. U.S. Department of the Interior, Minerals Management Service, Alaska OCS Region Social and Economic Studies, Technical Report No.147. Wainwright Traditional Council and The Nature Conservancy. 2008. Wainwright Traditional Use Area Conservation Plan Map Book. Wainwright, Alaska.

²¹ See Dep't of Commerce, Nat'l Oceanic and Atmospheric Admin, Nat'l Marine Fisheries Serv., Comments Re: Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Draft Supplemental Environmental Impact Statement (Draft SEIS) for the Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 in the Chukchi Sea. (Feb. 28, 2011), at 7 (“NMFS recommends that BOEMRE modify Lease Sale 193 and adopt Alternative III (Corridor I Deferral) given that the larger corridor offers a precautionary approach to afford protection of marine resources in a data limited environment.”).

²² Weingartner et al. 2005. Circulation on the north central Chukchi Sea shelf. Deep Sea Research Part II: Topical studies in Oceanography 52:3150-3174.

²³ Martin, S. and R. Drucker. 1997. The effect of possible Taylor columns on the summer ice retreat in the Chukchi Sea. Journal of Geophysical Research 102:10473-10482.; Spall, M.A. 2007. Circulation and water mass transformation in a model of the Chukchi Sea. Journal of Geophysical Research 112.

²⁴ Aldrich, H.L. 1915. Lands in the Arctic: what may be beyond ice as old as the year one. New York Times. http://query.nytimes.com/mem/archive-free/pdf?_f=1&res=9C00E0D81138E633A25757C2A96F9C46496D6CF.

this persistent lobe of ice, and the minimum September sea ice extent has come that far south only once in the last decade.²⁵ In comparison, Hanna Shoal and Post Office Point were ice-covered seven out of ten years in the 1980s and four out of ten years in the 1990s. Nonetheless, Post Office Point and Hanna Shoal continues to be an area of persistent ice floes, which are very important for ice-associated wildlife. Although the pack ice is expected to further recede with climate change, the seafloor topography is likely to continue to divert warm waters, and Hanna Shoal has the potential to provide substantial lingering ice floes well into the future compared to other areas in the region,²⁶ and to become a last stronghold for some species. As a result, Hanna Shoal—and any buffer zone necessary to protect it from the impacts of oil and gas operations—should be excluded from the Chukchi Sea lease sale.

V. Conclusion

At the conclusion of the remand process, the revised draft SEIS indicates that Secretary Salazar will choose whether to “reaffirm, modify, or cancel the Department’s previous decision on Sale 193.”²⁷ Given the shortcomings of the revised draft SEIS and the significant threats revealed by the VLOS, we urge Secretary Salazar not to affirm the previous decision. If the Secretary chooses to affirm the previous decision, he should affirm a modified alternative that better protects the key areas that are especially important for wildlife or for subsistence purposes. Specifically, he should exclude from the lease sale the sixty-mile offshore corridor and Hanna Shoal. In addition, the Secretary should suspend operations²⁸ on remaining Chukchi leases until:

- BOEMRE evaluates the findings from the June 23, 2011 U.S. Geological Survey (USGS) report and produces a clear, coherent strategy for gathering information necessary to determining whether, where, when and how oil and gas activities can occur;
- A comprehensive, integrated research and monitoring plan is in place that will provide the information necessary to make informed decisions regarding oil and gas activities in the Chukchi Sea;
- BOEMRE develops and implements a plan to protect areas that are important for their ecological and subsistence values; and
- There is demonstrated capacity to contain and effectively respond to a blowout in the specific arctic conditions where activities are planned.

Accessed October 2008; Bockstoce, J.R. 1986. Whales, men and ice: the history of whaling in the western Arctic. University of Washington Press, Seattle, Washington.

²⁵ National Snow and Ice Data Center. 2010. Monthly sea ice extent. GIS shapefile. <http://sidacs.colorado.edu/DATASETS/NOAA/OI2155/shapefiles/>. Accessed January 2010.

²⁶ Spall, M.A. 2007. Circulation and water mass transformation in a model of the Chukchi Sea. Journal of Geophysical Research 112.

²⁷ Revised Draft SEIS at 3.

²⁸ See 30 C.F.R. § 250.168 (authorizing BOEMRE to suspend operations on OCS leases); see also id. § 250.172.

Thank you for considering our comments. We look forward to working with BOEMRE to ensure that the Chukchi Sea ecosystems are understood and protected.

Sincerely,


Marilyn Heiman
Director, U.S. Arctic Program
Pew Environment Group


Andrew Hartsig
Director, Arctic Program
Ocean Conservancy

Appendix 1

November 29, 2010

VIA EMAIL

John Goll, Director
Alaska OCS Region
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BOEMREAKPublicCommen@boemre.gov

Re: Chukchi Sea Lease Sale 193 Draft Supplemental Environmental Impact Statement

Dear Director Goll:

The Pew Environment Group appreciates the opportunity to comment on the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS). Unfortunately, the draft SEIS does not provide the "hard look" at the environmental impacts of Lease Sale 193 required by the National Environmental Policy Act (NEPA) because it fails to include necessary information regarding environmental consequences of oil and gas activities within the lease sale area. Thus, we request that BOEMRE prepare a revised draft SEIS that fully addresses the issues presented below.

The draft SEIS was prepared in response to a July 21, 2010 order of the Alaska federal district in *Native Village of Point Hope v. Salazar*. In that case, plaintiffs challenged the adequacy of the Final Environmental Impact Statement (FEIS) prepared by BOEMRE for the nearly 30 million acre Chukchi Sea Lease Sale 193. The court concluded that the FEIS analysis of environmental impacts of oil and gas activities in the Chukchi Sea lease area was deficient, and required the agency to rectify those flaws in a supplemental EIS. Specifically, the court ordered BOEMRE to (1) analyze the environmental impact of natural gas development; and (2) determine whether missing information identified by BOEMRE in the FEIS was essential or relevant to the agency's decision making as required under NEPA regulation 40 CFR 1502.22; then (3) determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. Our comments focus on the draft SEIS' assessment of the relevance and need for information that was identified in the FEIS as missing or incomplete.

As an initial matter, we note that the analysis in the draft SEIS is not consistent with the Department of Interior's offshore oil and gas program reforms that have been adopted in response to the *Deepwater Horizon* oil spill in the Gulf of Mexico. The Secretary of Interior has announced several changes to improve its analyses and decisions, most notably with respect to

NEPA compliance¹ and with respect to ensuring that decisions are based on sound science as detailed in the September 29, 2010, Secretarial Order No. 3305. In addition, the Department's September 1, 2010 Outer Continental Shelf (OCS) Safety Oversight Board report provided recommendations to strengthen permitting and environmental stewardship. The report highlighted concerns with BOEMRE's failure to fulfill its dual mandate to lease offshore lands, yet also to protect the environment and cultural resources. The Alaska Region must ensure these recommendations and reforms are implemented in all new decisions, including its draft SEIS for the Chukchi Sea. To date, the Alaska Regional office of BOEMRE has failed to do so.

NEPA and OCSLA Require Missing or Incomplete Information be Included in the SEIS

BOEMRE was ordered to supplement the FEIS it prepared for Lease Sale 193 by reassessing the extent and relevance to decision making of missing information about the environmental impacts of offshore oil and gas activities in the Chukchi Sea. In preparing the draft SEIS, BOEMRE must comply with NEPA's obligation to take a "hard look" at environmental impacts, just as it must in preparing an initial FEIS. The draft SEIS fails to do so.

The draft SEIS purports to respond to the court's order to meet the requirements of NEPA regulation 40 CFR 1502.22² by determining whether missing information in the FEIS is relevant to assessing potentially significant effects of oil and gas development in the Chukchi Sea, and whether the missing information is essential to a reasoned choice among the FEIS' alternatives. The purpose of that regulation is to require agencies to gather all information necessary to make a decision, but to allow it to move forward in cases where information might not be relevant to the decision to be made or if the cost of obtaining the information is exorbitant. BOEMRE has not taken seriously its obligation to make a decision informed by science, and to gather whatever missing scientific information is needed, but has instead undertaken a paper exercise, simply cataloging the hundreds of statements in the FEIS regarding missing information and then concluding that the addition of any of this information is not necessary in the decision-making process.

BOEMRE's primary rationale for its assertion that the information is not essential at the lease sale stage is that the decision is not a consequential commitment of the area to oil and gas activities and information can be obtained at later stages of the Outer Continental Shelf Lands Act (OCSLA) process, when the agency is evaluating exploration or production plans. This

¹ CEQ NEPA Guidance available at http://ceq.hss.doe.gov/current_developments/docs/CEQ_Report_Reviewing_MMS_OCS_NEPAImplementation.pdf

² Once incomplete or unavailable information regarding a foreseeable significant adverse effect is disclosed in an EIS, NEPA regulation 40 C.F.R. 1502.22 requires that: "If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement." Thus, the focus of the regulation is on obtaining that information and including it in the EIS.

reasoning misconstrues OCSLA, and also overlooks longstanding BOEMRE practice to conduct only abbreviated environmental assessments at the exploration plan stage and instead to rely heavily on the lease sale EIS analysis. This practice is necessitated by OCSLA, which requires the Secretary of the Interior to approve exploration plans within 30 days, constraining BOEMRE's ability to undertake an environmental review at that stage beyond the brief environmental assessment (EA) that, as a matter of practice, it prepares at the exploration stage.

More significantly, BOEMRE's reasoning ignores the nature of the decision to be made at each stage of oil and gas development under OCSLA. It is at the lease sale stage that the agency makes the decision about whether, where and how oil and gas activities will occur within a particular portion of the outer continental shelf. Once the leases are issued, the agency's ability to alter course is constrained. OCSLA authorizes the Secretary to suspend or cancel a lease or permit only if oil and gas activities threaten to cause serious harm or damage to life, property, the environment, or national security or defense. At the exploration plan stage, the decision is whether to approve a plan that outlines the exact location, timing and equipment to be used to explore for productive deposits of oil and gas. The decision at the development and production stage is similar. In other words, while OCSLA establishes stages for development of oil and gas resources in the outer continental shelf, the decision about whether to allow that activity to go forward occurs at the lease sale stage; the decisions at later stages are simply refinements of the lease decision and BOEMRE cannot change the decision about whether to authorize oil and gas activity absent unusual circumstances. Thus, BOEMRE must have complete information about the environmental effects at the lease sale stage *before* it decides whether to authorize oil and gas activities. This thorough understanding of the existing environment and the environmental consequences of development within that environment is essential not only to determining whether to authorize oil and gas activities but also to identify any mitigation measures to minimize potential environmental impacts.

BOEMRE also asserts that it can defer gathering missing information at the lease sale stage because tiering of NEPA analyses is allowed within OCSLA. However, BOEMRE's approach is a misapplication of "tiering" within NEPA. Tiering is a means to allow an agency to avoid repetitive analysis in subsequent, more site-specific phases of a project. Thus, if a complete EIS is prepared at the first stage in which potential significant effects are identified, subsequent decisions can often be accompanied by a shorter EA/FONSI or an EIS that incorporates and follows from the analysis in the prior EIS. The key is that tiering allows for *subsequent* NEPA analysis to build on a thorough EIS prepared at an earlier stage. By assuming that it can defer gathering information until a later stage, BOEMRE is in essence committing itself to undertaking an EIS later, turning tiering on its head. In light of the fact that BOEMRE's decisions regarding approvals for oil and gas activity continue to be challenged, it makes no sense to pursue a status quo approach that satisfies no one. In its August 16, 2010 report and recommendations to BOEMRE regarding NEPA implementation, the Council on Environmental Quality (CEQ) clarified the purpose and implementation of tiering.³ The practical reality is that in order to fully comply with NEPA within the structure of OCSLA, the agency must prepare a full assessment of potential impacts and the site-specific details and impacts can then easily be addressed within the compressed approval time period for an exploration plan.

It bears mentioning that the task of gathering the vast amount of incomplete and missing information necessary to conduct a thorough analysis of the environmental impacts of oil and gas activity within Lease Sale 193 is a consequence of BOEMRE's decision to offer for lease an area approximately the size of Colorado.⁴ It would be daunting in the best of circumstances to gather and analyze the necessary information for an area of this huge scope. Nonetheless, BOEMRE cannot use its decision to offer for lease such a huge area to then treat the lease sale decision as a programmatic rather than site specific decision or as an excuse to not fully analyze the environmental impacts of oil and gas activity within that area on the grounds that it is too big with too many unknowns.

Information Identified as Missing or Incomplete in the FEIS and draft SEIS is Essential to Making Decisions Regarding the Lease Sale

BOEMRE also concludes that missing information is not relevant or essential to a choice among alternatives because the impacts under all of its alternatives are essentially the same. This rationale does nothing to support its position but instead suggests that its range of alternatives is inadequate, further compounding the flaws in the FEIS. Much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, where, and under what conditions to offer oil and gas leases in the Chukchi Sea. Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread

³ CEQ NEPA Guidance at 22-24, available at http://ceq.hss.doe.gov/current_developments/docs/CEQ_Report_Reviewing_MMS_OCS_NEPAImplementation.pdf
⁴ Under OCSLA, leases are to be for tracts "consisting of a compact area not exceeding five thousand seven hundred and sixty acres, as the Secretary may determine, unless the Secretary finds that a larger area is necessary to comprise a reasonable economic production unit." 43 U.S.C. Sec. 1337(6)(b).

across the Chukchi Sea, and this lack of information has been widely acknowledged (e.g., CRRC 2010, MBC 2007). Table 1 depicts by category the types of essential missing basic data about the Chukchi Sea ecosystem.

Type of Essential Need (or gap in knowledge)	Explanation	Example of Essential Need or gap in knowledge
Topic	Some resources have not been studied in the Arctic or have very little information.	Zooplankton, benthic organisms, fish
Abundance	For many species or species groups, there is little or no information on population size and/or relative abundance.	Zooplankton, Opilio crab, fish, ice seals, Chukchi polar bear population, Kittlitz's Murrelet
Spatial coverage	Many resources studied in depth still lack complete coverage over the Beaufort and Chukchi seas within the U.S. EEZ.	Benthic biomass, fish, Steller's Eider, Arctic fox
Type of Essential Need (or gap in knowledge)	Explanation	Example of Essential Need or gap in knowledge
Temporal coverage	Outside of remotely sensed satellite information (temperature, chlorophyll-a, etc.), no resource in the Arctic has adequate data to detect temporal change over annual or decadal time periods for the Beaufort and Chukchi seas.	Invertebrates, fish, birds (surveyed in nearshore areas only), and marine mammals (surveyed in Beaufort only)
Seasonal coverage	Most surveys occur in July and August when weather, sea ice, and snow are in optimal condition; direct observation is difficult to impossible at other times of the year. Most species are lacking adequate seasonal distribution data.	Invertebrates, benthic organisms, fish, polar bear, ribbon seal
Spatial scale	Very broad-scale information covering the Beaufort and Chukchi seas is available for many species. Similarly, fine scale survey data in disjunct development areas also exist. Mid-scale data with full spatial coverage are needed to make reasoned landscape-scale management decisions.	The Outer Continental Shelf Environmental Assessment Program (OCSEAP) which occurred in the 1970-1980s is a good mid-scale survey that has not occurred in recent years.

Another type of missing information is data about the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the *Deepwater Horizon* Gulf of Mexico oil spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur (Nuka 2010). For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information on the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the draft SEIS.

BOEMRE Failed to Include in the FEIS and draft SEIS Available Analyses and Studies

BOEMRE completed this draft SEIS without obtaining and incorporating information from relevant Department of Interior Arctic Ocean science initiatives. Those efforts, though not currently complete, would contribute to a more thorough analysis of environmental impacts in the draft SEIS. Specifically, BOEMRE failed to take advantage of - or even acknowledge - the ongoing analysis by the U.S. Geological Survey (USGS) to identify information gaps in the Arctic Ocean as related to decisions about OCS activity that was ordered by the Secretary of Interior on March 31, 2010. That analysis will be completed in April 2011. The draft SEIS also appears to have been developed in isolation from an assessment BOEMRE is undertaking specifically to address missing information about the Chukchi Sea (MBC 2007). This Chukchi Offshore Monitoring in Drilling Area (COMIDA) effort by BOEMRE is intended to "characterize the Chukchi Sea ecosystem in order to detect and distinguish future changes resulting from oil industry activities, natural variability, and other anthropogenic effects... prior to oil and gas exploration activities" (MBC 2007). The COMIDA effort is supposed to look at data needs and provide monitoring recommendations from an ecosystem perspective, and to obtain baseline data before oil and gas activity, including exploration begins in the Chukchi Sea. While COMIDA has a promise of providing sufficient information to assist the agency in making informed decisions, the agency is not using the information gained from this research effort to inform its decisions regarding if, when, where and how oil and gas activities might occur in the Chukchi Sea.

Moreover, BOEMRE could have - and should have - included additional information in the draft SEIS that has become available in the two years since the FEIS was completed. Attachment 1 is a list of references that include relevant and essential information that should be incorporated into a revised draft SEIS.

One example pertains to the bowhead whale - an important marine mammal for the Inupiat along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the Endangered Species Act. The FEIS acknowledges "data are limited on the bowhead whale fall migration through the Chukchi Sea before the whales move south into the Bering Sea." And that "recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available." In the draft SEIS (Appendix A) BOEMRE

responded that: "While there will always be some lag between environmental change and available data that reflects that change, BOEM (formerly MMS) has conducted or commissioned extensive study bowhead use of the Chukchi Sea, and a general understanding of the bowhead distribution, abundance, and habitat use is known." The important and very pertinent research to which the agency refers was finalized in July of this year, and made publicly available on their website during the fall of 2010 (Quakenbush et al. 2010). The draft SEIS goes on to say "Existing information is sufficient to support sound scientific judgments and reasoned managerial decisions, especially during the earlier stages of OCSLA review, which are necessarily more programmatic in nature. Furthermore, the missing information pertains to potential impacts equally applicable to each action alternatives, meaning that additional information on this subject is not likely to be useful to decision making at this stage. Overall, this incomplete information is not essential to a reasoned choice among alternatives." However, this is not necessarily the case, as Quakenbush et al. (2010) identified important corridors for migration and important feeding areas that should be excluded from the lease sale or at least considered essential information.

The alternatives considered by BOEMRE in the draft SEIS all have the same impacts, with the exception of no action – indicating that the range of alternatives is too narrow. Ecologically sensitive areas must be identified and protected. Areas within an ecosystem are not equal in biological and ecological terms; some areas are more important than others to the ecosystem or human populations. Identification of important ecological areas based on essential habitats and functions in the Arctic ecosystem along with traditional cultural activities, can be an important step toward ensuring ecosystem functionality. The ecologically and culturally sensitive areas in the Arctic Ocean should be removed from the leasing process.

The draft SEIS also fails to include all of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska. For example, Attachment 2 documents peer reviewed literature produced by the Environmental Studies Program since 1990⁵ that was not considered, but relevant to the FEIS and subsequent draft SEIS. The Alaska Annual Studies Plan Final FY 2011 notes that since the conception of the Environmental Studies Program in 1973 more than \$350 million has funded studies in Alaska across 15 planning areas (BOEMRE 2010). Since much time and effort was put into these studies, it is for BOEMRE' responsibility to consider the results and implications of these study results, particularly as they may contribute to some of the essential unknown information about species and habitats as well as the effects of oil and gas exploration and development on these species and habitats.

Traditional Knowledge Can Be Used to Fill Gaps in Information

Some of the information that was identified in the FEIS and draft SEIS as missing or incomplete could be satisfied in part by incorporating local and traditional knowledge. Local and traditional knowledge, a different but equally valid knowledge system will help expand our understanding of the Arctic and can supplement and enhance existing knowledge. Indigenous peoples who have lived in the Arctic Ocean region for millennia have developed a wealth of knowledge about

⁵ BOEMRE provides a listing of all peer-reviewed ESP studies at: http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf (last accessed 21 November 2010)

the region. They depend on local plants and animals for food, clothing and shelter, and have learned a great deal about the species they use and see. In recent years, a substantial amount of research has focused on traditional knowledge in the Arctic. Major projects such as the Arctic Council's Arctic Climate Impact Assessment (ACIA 2004) have incorporated traditional knowledge in efforts to understand what is taking place in the region. Nonetheless, there is much more to be done to make the knowledge of Arctic peoples more widely available, such as incorporating traditional knowledge in management processes that directly impact people, including in this EIS process. Co-management organizations and institutes of public governance are one means of incorporating not just knowledge but the holders of that knowledge in the decision-making process. Greater involvement by Arctic peoples in the governance of their regions and communities allows their knowledge to benefit modern institutions. These approaches can help in the development of long-term solutions to economic and environmental challenges in the Arctic.

Documenting knowledge in a report, however, is just one step towards fully incorporating what Arctic peoples have learned over generations. A report about traditional knowledge may put certain facts and observations before a larger audience but using that knowledge appropriately entails the wisdom than many people associate with traditional perspectives. We have attached a bibliography with selected references that should help provide guidance and provide examples of situations where traditional knowledge has been effectively utilized (Attachment 3). Traditional knowledge can help fill some of the gaps in the draft SEIS as well as guide future efforts to collect necessary information.

BOEMRE Must Employ a Holistic Ecosystem-Based Approach to Research

We recognize and acknowledge that research has been and is currently being conducted in the Chukchi Sea by various U.S. government agencies, and by industry (e.g., BOEMRE 2010, Funk et al. 2007). These studies are important and contribute to our baseline knowledge and understanding of the Chukchi Sea ecosystem. However, the existence of such research does not necessarily mean that it is relevant or complete to sufficiently inform the decisions about whether, where, when, and how oil and gas activity should occur in the Chukchi Sea. A large quantity of research cannot substitute for relevant research.

Existing scientific studies have been undertaken in an uncoordinated basis without an overarching purpose for the information or a clearly identified goal to advance knowledge of Chukchi Sea ecosystems. Specifically, many of the current scientific studies are focused on specific drilling lease sites that are of interest to industry. They provide information about physical and biological aspects (e.g., species) for a small area within a larger ecosystem for a limited time period. To be useful to leasing decisions, longer-term studies must be undertaken in order to provide an understanding of the variability of species over time. Moreover, the current piecemeal approach to science currently practiced by BOEMRE in its Environmental Studies Program Annual Study Plan, is not adequate. Narrow studies are undertaken by contractors responding to a request for proposal (RFP) with no coordinated analysis and synthesis of that information. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea.

BOEMRE has used the same flawed segregated approach that it uses in its research to its assessment of missing information in the draft SEIS. The agency has reached the conclusion that none of the missing information is essential to decision making by addressing each statement regarding missing information in isolation without looking at the entire set of research needs for particular species or other environmental parameters. However, a more holistic approach, would likely lead to a different conclusion. It is possible to conclude that each piece of missing information might not be relevant to the decision to be made, but taken together, all of the missing information for a particular species certainly is important. This type of piecemeal approach to scientific research is pervasive in all of BOEMRE research study programs and ensures that scientific research produces little useable information to advance knowledge about the Arctic Ocean.

What is needed instead is a comprehensive, integrated research and monitoring plan for the U.S. Arctic to improve our understanding of Arctic marine ecosystem structure and functioning and to avoid adverse impacts on the Arctic environment and subsistence way of life. Such a plan should (1) define existing information and research needs such as in a gap analysis (this is currently undertaken by the USGS) (2) gain a more comprehensive catalog of species, populations and habitats (including seasonal migrations) in a marine life assessment (3) track the physical factors that influence and determine biological productivity, habitat preference and migration pathways in an integrated, comprehensive environmental monitoring program (4) secure a better understanding of ecosystem interactions and trophic linkages and the effects of human activity and (5) integrate scientific data to identify processes and habitats that are sensitive and vulnerable to disruption. Such work is critical to the development of a comprehensive, collaborative program of research, monitoring, data collection, mapping, and documentation of local and traditional knowledge in the Arctic Ocean. This science plan would provide the framework for all development activity in the Arctic, and approval of oil and gas development activity would have to be consistent with the plan's ecological science, monitoring, and assessments.

BOEMRE Must Prepare a Revised SEIS

BOEMRE's draft SEIS fails to adequately address the district court's order and fails to satisfy NEPA's requirements. The draft SEIS also fails to incorporate the offshore oil and gas program reforms initiated by Department of Interior in the face of the worst environmental disaster in our nation's history. BOEMRE should prepare a revised draft SEIS only after it has gathered missing information and drawn on the work of other agencies.

Sincerely,

Marilyn Heiman
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Eleanor Huffines
Manager, U.S. Arctic Program
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**Please Note:* This email includes 3 Attachments to be considered in the public record with this comment letter.

References

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ALASKA WILDERNESS LEAGUE – CENTER FOR BIOLOGICAL DIVERSITY
 DEFENDERS OF WILDLIFE – EARTHJUSTICE
 NATIONAL AUDUBON SOCIETY – NATURAL RESOURCES DEFENSE COUNCIL
 NORTHERN ALASKA ENVIRONMENTAL CENTER – OCEAN CONSERVANCY
 OCEANA – PACIFIC ENVIRONMENT – REDOIL – SIERRA CLUB
 THE WILDERNESS SOCIETY – WORLD WILDLIFE FUND

November 30, 2010

VIA EMAIL

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Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

The undersigned groups hereby submit the following comments to the draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act (NEPA).

The draft SEIS purports to address the issues identified by the Alaska Federal District Court's remand order in *Native Village of Point Hope v. Salazar*, No. 1:08-cv-00004-RRB (D. Alaska). Rather than furthering the Obama administration's commitment to sound science, however, the draft appears to be a paper exercise designed to justify the earlier decision to hold Lease Sale 193. For the reasons explained below, the draft should be rescinded, a thorough assessment of missing information undertaken, and a re-assessment of natural gas development conducted. Once it has prepared an adequate and informative draft SEIS based on that information, BOEMRE should reengage in a public comment period. Thereafter, the agency should consider anew in light of these new analyses whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

In *Native Village of Point Hope*, the Court determined that Lease Sale 193 was held in violation of NEPA because BOEMRE prepared a flawed environmental impact statement (EIS). BOEMRE failed to conduct a full analysis of missing information about the Chukchi Sea and the effects of oil and gas activities pursuant to Council on Environmental Quality regulation 40

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Appendix 2

C.F.R. § 1502.22, and it failed to analyze the potential impacts of natural gas development. Accordingly, the Court remanded the decision to the agency with direction to redo its environmental analysis in these respects. In the draft SEIS, BOEMRE falls far short of satisfying the Court's order to meet the requirements of NEPA.

With respect to the Section 1502.22 missing information analysis, BOEMRE acknowledges it cannot make basic assessments of the lease sale's impacts in light of data gaps, but it concludes in the draft SEIS that *not one piece of information* identified as missing in the original EIS is essential to the lease sale decision. The conclusion is not supported or credible, demonstrates a desire to proceed quickly rather than deliberately, does not comply with the law, does not reflect a thoughtful assessment of the nature of the information that should be available at the critical lease sale stage of the process, and is a significant step in the wrong direction. With respect to analyzing natural gas development, the draft SEIS contains little more than a justification of the analyses contained in the original EIS. BOEMRE's conclusion that natural gas development would have only minimal additive impacts suffers from significant flaws.

BOEMRE should take actions in the Arctic Ocean that are consistent with the Administration's commitment to science-based decision-making. It should ensure that the information required for informed decision-making is available, the systemic failures in regulatory oversight made evident by the *Deepwater Horizon* accident are addressed, and new decisions, including the decision whether to cancel, amend, or affirm Chukchi Sea Lease Sale 193, are made taking into account what we have learned. Accordingly, it must not finalize the draft SEIS as currently written, but should undertake a meaningful reanalysis of Lease Sale 193 that is consistent with NEPA, and the Administration's commitment to sound science in decision-making.

I. MISSING INFORMATION ANALYSIS

It is undisputed that there are significant gaps in basic information about the Arctic Ocean and that, absent this information, it is not possible, in many instances, to understand the scope of potential impacts from oil and gas activities on the region's wildlife and people. The need for more information has been acknowledged repeatedly by the Administration: in President Obama's National Ocean Policy process, the National Marine Fisheries Service's closure of the Arctic Ocean to commercial fishing, and in Secretary Salazar's initiation of a scientific gap analysis by the United States Geological Survey. The current draft SEIS clashes badly with the Administration's commitment to sound science in decision-making.

In the original Chukchi Sea Lease Sale 193 EIS, BOEMRE identified literally hundreds of instances in which it lacked information about the Chukchi Sea, ranging from basic science about the presence and behavior of species in the region to information about the effects of oil and gas activities on wildlife. However, it failed to analyze which of the missing information was relevant to reasonably foreseeable adverse impacts and essential to a reasoned choice among alternatives and to obtain that information absent a finding that the costs of obtaining the information are exorbitant. In *Native Village of Point Hope*, the Alaska Federal District Court ruled that this failure constituted a violation of 40 C.F.R. § 1502.22. The Court remanded the EIS to the agency and directed it to conduct this analysis as required by NEPA.

Section 1502.22 sets out an "ordered process" for an agency preparing an EIS in the face of missing information. *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1244 (9th Cir. 1984). When there is incomplete information relevant to reasonably foreseeable significant adverse impacts that is essential to a reasoned choice among alternatives, an agency must obtain and include the missing information in the EIS if the overall costs of obtaining it are not exorbitant. 40 C.F.R. § 1502.22. The regulation furthers NEPA's purpose of ensuring that agencies make "fully informed and well-considered decision[s] . . ." *Vt. Yankee Nuclear Power Corp. v. Natural Resources Def. Council*, 435 U.S. 519, 558 (1978), its mandate of "widespread discussion and consideration of the environmental risks and remedies associated with [a] pending project", and its "require[ment] that this evaluation take place *before* a project is approved." *LaFlamme v. FERC*, 852 F.2d 389, 398 (9th Cir. 1988) (internal quotation marks omitted).

The draft SEIS purports to respond to the Court's order to satisfy the requirements of Section 1502.22. However, BOEMRE's determination that none of the missing information is essential to a reasoned choice among alternatives is arbitrary and improper. Rather than engage in a good-faith effort to analyze the missing information and identify which of it is essential to a reasoned choice among alternatives, the agency appears instead to have spent its energy developing justifications for avoiding its obligation to obtain essential information. Appendix A of the draft SEIS contains a 140-page exposition of the instances in the original EIS in which the agency said "we don't know" about the Chukchi Sea and the effects of oil and gas activities there. For each instance of missing information, BOEMRE offers an arbitrary justification—usually one of the same five recurring excuses discussed below—for why it does not need to obtain the particular information before leasing in the Chukchi Sea. This approach is inconsistent with Section 1502.22 and the agency's obligation to reconsider the lease sale in light of a new analysis of missing information. Much of the missing information identified in the original Lease Sale 193 EIS is essential to the decision at issue—whether, when, where, and under what conditions to issue leases in the Chukchi Sea. The appendix demonstrates the agency's misdirection of resources into justifying an already-made decision, rather than engaging in a meaningful inquiry, real science, or research to inform a reexamination of the lease sale decision.

A. Because the decision to sell leases is a critical decision in the offshore development process, information relevant to the resources in the area and to the effects of oil and gas activity on those resources is essential to making that decision.

Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, information about the biological function of different parts of the planning area and the importance of those parts to the regional ecosystem is essential to this choice. *See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv.*, 148 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2001) (information is essential if without the data the agency cannot know if its conclusions regarding impacts are reliable). Similarly, understanding the effects of industrial oil and gas activities on different components of the ecosystem is essential to deciding where, if anywhere, those activities should be permitted and how they should be constrained.

A lease sale is a meaningful decision about the commitment of an area to oil and gas activity. It is the second of the "four distinct statutory stages [under the Outer Continental Shelf Lands Act

(OCSLA) to developing an offshore oil well: (1) formulation of a five-year leasing plan by the Department of the Interior; (2) lease sales; (3) exploration by the lessees; (4) development and production.” *Sec’y of the Interior v. California*, 464 U.S. 312, 337 (1984). Each of the four stages presents the decision-maker with a different and distinct choice about offshore development. The five-year leasing plan is a programmatic evaluation of the nation’s outer continental shelf areas to determine whether any of those areas should be open to potential future oil and gas lease sales in the coming five years. 43 U.S.C. § 1344(a). At the lease sale stage, BOEMRE decides whether to hold the scheduled sales and, if so, under what conditions. In the third stage, the agency reviews exploration plans submitted by an oil company and determines whether to allow the company to drill wells on the lease tracts purchased during the second phase. If it finds recoverable reserves, the company would submit a development plan, which is reviewed and approved or denied during the fourth and final phase.

Before a lease sale, the government has complete discretion over whether to permit oil and gas activity in an area included in a five-year plan and, if so, under what conditions to permit the activity. Once valid leases are issued, the government’s options are much more constrained. Once they have obtained leases, companies may conduct ancillary activities on their leases, such as certain seismic surveying, without further approval from BOEMRE, and they may submit for approval exploration drilling plans and development plans. Further, by selling leases, the government sells a promise to the lessee that it will comply with the procedures and standards set forth in OCSLA in permitting the exploration and development of the leases. *Mobil Oil Exploration & Producing Se. v. United States*, 530 U.S. 604, 620-621 (2000) (explaining that “lease contracts g[i]ve the companies more than rights to obtain approvals. They also g[i]ve the companies rights to explore for, and to develop, oil.”). Accordingly, once the government has lawfully issued valid leases, it can suspend activities on leases only for reasons and pursuant to the procedures set forth in OCSLA and its implementing regulations. These include a “threat of serious, irreparable, or immediate harm or damage to life (including fish and other aquatic life), to property, to any mineral deposits (in areas leased or not leased), or to the marine, coastal, or human environment.” 43 U.S.C. § 1334(a)(1)(B), or when “necessary to carry out the requirements of NEPA or to conduct an environmental analysis,” 30 C.F.R. § 250.172(d). Similarly, it can only cancel leases for reasons and following procedures set forth in OCSLA, 43 U.S.C. § 1334(a)(2)(A) & (B); see also 30 C.F.R. § 256.77(d), and cancellation entitles lease holders to compensation, 43 U.S.C. §1334(a)(2)(C); 30 C.F.R. § 250.184.

BOEMRE must comply with NEPA at each stage of OCSLA offshore development process. Because the decision being made at each stage differs, so do the NEPA analyses. At the five-year plan stage, the analysis is relatively general in light of the programmatic nature of the decision. An analysis at the lease sale stage must examine more closely the impacts of oil and gas activities in a particular area. It must provide information to the decision-maker and the public about the consequences of oil and gas activities in a particular area and offer a reasonable range of alternatives. These alternatives must encompass the size and scope of the sale, including whether to defer certain areas from leasing, and the imposition of stipulations in the leases that limit or mitigate the effects of activities under the leases. Because of the nature of the decision at the lease sale stage—whether, where, and under what conditions to open areas to oil and gas activities—the analysis of potential impacts is different and more specific than the more general programmatic analysis at the five-year plan stage. The lease sale analysis is also relevant

to later-stage analyses, such as those conducted at the exploration stage. Typically, those analyses tier to and expand upon the lease sale analysis. In practice, moreover, BOEMRE has not obtained additional information at the post-lease exploration stage, because it has prepared only short environmental assessments, rather than full EISs, for these plans.

Thus, a lease sale decision is a meaningful commitment in OCSLA’s staged offshore development process, and a meaningful NEPA analysis must provide information to the decision-maker and the public about the potential effects of oil and gas activities on the areas under consideration for leasing. As described more fully below, missing information about the basic biology of the Chukchi Sea ecosystem and the effects of oil and gas activities to the biological resources of the areas under consideration for leasing is essential to the lease sale decision.

B. Missing information identified in the original Lease Sale 193 EIS is essential to the lease sale decision.

In the draft SEIS, BOEMRE concedes that much of the information identified as missing in the 2007 Chukchi Sea Lease Sale 193 EIS was relevant to potentially significant effects of the lease sale. See BOEMRE, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska, Draft SEIS, OCS EIS/EA BOEMRE 2010-034 (Draft SEIS) at App. A (Sep. 2010). However, it concludes that none of the information was essential to reasoned choices among alternatives, and thus the agency was not obliged to obtain the information. *Id.* at 10-11. That conclusion is unwarranted.

1. Missing information is pervasive and goes to fundamental questions at issue in the lease sale decision.

The missing information that forms the basis for the Court’s remand includes the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals, and birds—which in other regions are typically the most well-studied segment of an ecosystem. The missing information includes the abundance, distribution, and life history characteristics for many of these species. The state of information about these more charismatic animals in the ecosystem is further evidence of the lack of information about the rest of the ecosystem, including the clams, worms, sea stars, and other species that are important prey for the more conspicuous species. The information that does exist is outdated and too spotty to provide an appropriate baseline for decision-making. This lack of basic information about the ecosystem makes it difficult, if not impossible, to determine whether there will be significant impacts to animals and the ecosystem. Additionally, there are substantial data gaps about the effects of oil and gas activities, like industrial noise, on marine mammals and fish. These gaps further limit the agency’s ability to meaningfully analyze the impacts of the lease sale or chose among alternatives.

Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread across the Chukchi Sea, and this lack of information has been widely acknowledged. See, e.g., NRDA – Coastal Response Research Center. 2010. Natural Resources Damage Assessment

(NRDA) in Arctic Waters: The Dialogue Begins. University of New Hampshire, Durham, NH; MBC Applied Environmental Sciences. 2007. Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area OCS Study MMS 2007-002. Prepared by MBC Applied Environmental Sciences, Costa Mesa, CA for the U.S. Dept. of the Interior, Minerals Management Service, Alaska OCS Region (MBC, 2007). Table 1 depicts by category some of the types of missing basic data about the Chukchi Sea ecosystem.

Type of Gap	Explanation	Examples of Gap
Resource	Some resources have not been studied in the Arctic or have very little basic, life history information.	Zooplankton, benthic organisms, fish
Abundance	For most species or species groups, there is little or no information on population size, relative abundance, and/or distribution. Furthermore, little is known about the ecological roles played by most species and thus which species are crucial for ecosystem health.	Zooplankton, Opilio crab, fish, ice seals, Chukchi polar bear population, Kittlitz’s Murrelet
Spatial coverage	Many resources studied in depth still lack complete coverage across the Beaufort and Chukchi seas within the U.S. EEZ.	Benthic biomass, fish, Steller’s Eider, pelagic birds, Arctic fox
Temporal coverage	Outside of remotely sensed satellite information (ice, temperature, chlorophyll-a, etc.), no resource in the Arctic has adequate data to detect change over annual or decadal time periods for the Beaufort and Chukchi seas.	Invertebrates, fish, pelagic birds, and mammals (surveyed in Beaufort only)
Seasonal coverage	Most surveys occur in July and August when weather, sea ice, and snow are optimal for human observers; direct observation is difficult at other times of the year. Most species lack adequate seasonal distribution data.	Invertebrates, benthic organisms, fish, polar bear, ribbon seal
Ecosystem Structure and Functioning	The physical, chemical and biological processes that help drive the composition of the food web, energy flow and spatial variability are not well understood.	Quantitative food web model, currents and winds, nutrient cycling, the effects of sea ice on productivity And species distribution
Applied research including understanding how the ecosystem is changing	Arctic marine ecosystems are poorly known to begin with, and are now changing in a myriad of ways. There is need for greater understanding of organismic and ecosystem-level responses to changes due to loss of sea ice, increased water temperature and acidification.	Effects of ocean acidification on benthic invertebrates, which are key part of the larger food web. Cumulative effects of disturbance and noise on bowhead whales and other marine mammals.

In addition to missing basic information about the ecosystem, including the species and relationships, we also lack a basic understanding of the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the Gulf spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur. See, e.g., Nuka Research

and Planning Group, LLC, Pearson Consulting LLC. 2010. Oil spill prevention and response in the U.S. Arctic Ocean: Unexamined risks, unacceptable consequences. Commissioned by the Pew Environment Group, U.S. Arctic Program, November 2010. Philadelphia, PA, USA, available at <http://oceansnorth.org/arctic-oil-spill-report>. For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information about the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the lease sale draft SEIS.

These broad areas of missing data about the basic ecology of the Chukchi Sea and the effects of oil and gas activities there render BOEMRE unable to answer questions that are essential to the decision about whether, where, when, and under what conditions to lease an area for oil and gas activities. Listed below are some examples of the types of questions essential to the decision.

- Where will Pacific walrus be during summer? In 2007 and 2009, walrus hauled out on land in large numbers in northern Alaska. Prior to 2007, walrus spent summers on sea ice in the Chukchi Sea. In 2010, a number of walrus hauled out along the U.S. Chukchi coast, yet a number of walrus also used the region around Hanna Shoal, which is squarely within the Lease Sale 193 area, extensively. Without knowing where walrus will be, infrastructure and activity cannot be positioned to avoid incidental takes and other impacts. See e.g., USGS 2010. *Walrus tracking and telemetry data acquired from walrus instrumented on the Alaska shores of the Chukchi Sea in September 2009*. Radio-tagging field report. USGS Alaska Science Center, Walrus research project, available at http://alaska.usgs.gov/science/biology/walrus/pdfs/EC09_Radio_Tagging_Field_Report.pdf; Jay, C.V. and A.S. Fishbach. (2008). *Pacific walrus response to Arctic sea ice losses*. U.S. Geological Survey Fact Sheet 2008-3041, available at <http://pubs.usgs.gov/fs/2008/3041/>.
- Which areas in the Chukchi Sea are crucial for various life stages of marine mammals? Satellite telemetry has shown that the movements of bowhead whales, beluga whales, walrus, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously anticipated. Without an understanding of which areas are crucial and why, it is impossible to identify critical areas that must be avoided by development and protected in the event of oil spills.
- How have distributions of marine birds changed since the pelagic surveys conducted in the mid-1970s to mid-1980s in the Outer Continental Shelf Environmental Assessment Program (OCSEAP)? For birds at sea, these data are now at least 25 years out of data and much has changed since. Previous data point to the importance of areas overlapping the lease sale area in the Chukchi Sea. Furthermore, because of a lack of baseline information, there is very little knowledge about long-term trends and variation due to climate change [(CRRRC 2010)]. In the Proceedings of the Northern Oil and Gas Research Forum held in Anchorage in October 2008, the forum acknowledged the importance of long-term studies compared to observations made at “a single point in time” and their usefulness. See http://alaska.boemre.gov/reports/2008rpts/2008_1028_proceedings.pdf.

- What are the distributions and life histories of species that are critical in marine food webs and how will loss of sea ice influence these species? Many marine birds and mammals rely on species like Arctic cod, yet there is a paucity of even basic knowledge about this species. Other of these species, such as Arctic cisco, are also very important for subsistence purposes. According to the environmental assessment on the recent Arctic Fishery Management Plan, sampling of fish and shellfish species is extremely limited, with only a small area of the Beaufort Sea off Barrow sampled adequately within the last 18 years. Some areas have never been sampled to determine even basic abundance estimates.
- How do the effects of climate change and industrial activity interact and are the effects cumulative?
- How will the distribution of species of concern (including ESA candidate or listed species) shift due to climate change? Species currently in the Chukchi may shift their ranges and key habitat areas. Species from the Bering Sea and farther south may move northwards, possibly requiring new areas or types of protection in the Chukchi Sea. The ability to reasonably predict such shifts is necessary to evaluate the life-cycle impacts of offshore development and infrastructure.
- How can quantitative risk and impact assessments be conducted? There is insufficient information about the distribution and productivity of plankton, benthic organisms, fishes, seabirds, the response of marine mammals to noise, ecological changes likely to be caused by sea ice loss, and other basic environmental parameters to support quantitative evaluation of potential and actual impacts from offshore activity, including oil spills. Without such information, risk and damage assessments are reduced to speculation or experts' opinions and recovery from an oil spill or other accident cannot be determined. Lack of an adequate quantitative baseline of information was the primary impediment to assessing ecological damages caused by the *Exxon Valdez* oil spill.
- What trajectories would spilled oil follow? The general atmospheric and circulation patterns of the Chukchi Sea have been mapped, but patterns and variability at the scale of an oil spill are not well known and are difficult to predict based on current understanding. In addition while general circulation patterns are known, there is relatively little understanding of the currents at the ocean's surface where the majority of oil collects in a spill. Without that knowledge, the placement of response equipment and the ability to respond promptly are hindered, reducing the ability to contain and recover spilled oil. Furthermore, there is insufficient information or monitoring capacity to project fine scale trajectories of spilled oil in real time to be projected in real time during a spill event, making it difficult or impossible to respond quickly and protect critical wildlife habitat areas, such as Kasegaluk Lagoon or Ledyard Bay.
- How can negative social and cultural impacts be avoided? Industrial development can disrupt traditional practices, interfere with cultural norms, and lead to social dislocation. Proper planning can help minimize such problems, but requires detailed understanding of local cultures and societies as well as the involvement of local communities in all phases of decision-making. The processes for such involvement have not yet been devised and tested for offshore oil and gas in U.S. Arctic waters. See Wernham, A. 2007. Inupiat health and proposed Alaskan oil development: Results of the first integrated health impact assessment/environmental impact statement for proposed oil development on Alaska's north slope. Ecohealth 4:500-513.

Because BOEMRE has not obtained any new information for this draft SEIS, it has left these and other questions unanswered, as they were in the original EIS. In light of the important decisions being made at the lease sale stage, as described above, the answer to these questions and others like them, are essential to the agency's choices at this stage.

During the remand, BOEMRE should obtain missing information to answer these and other important questions about the Chukchi Sea and the impacts of oil and gas development there. As discussed below and in the attachments, the most effective way to do this would be to engage in a comprehensive gap analysis, taking into account the ongoing United States Geological Survey effort, potentially supplemented by information from other federal agencies with expertise in the Arctic such as the National Oceanic and Atmospheric Administration, and then to undertake a comprehensive, coordinated, and integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.

2. Missing information is essential to the choice among the alternatives identified in the original EIS.

The original EIS illustrates that the kind of information missing in the Chukchi Sea is essential to the choice among alternatives. BOEMRE "carried forward" the range of alternatives it analyzed in the original 2007 lease sale EIS in the draft SEIS. Draft SEIS at 12. It dismisses the importance of the missing information for choosing among these original alternatives. However, as several examples below illustrate, much of the missing information is essential to the reasoned choice among the original four alternatives in the 2007 analysis:

- Information about bowhead whale use of the Chukchi Sea is incomplete. The original EIS acknowledges that data on bowhead use of the Chukchi Sea are dated, provide only limited insight into areas where bowheads may be exposed to oil and gas activities should they occur, and "should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales . . ." Draft SEIS, App. A at 21 of 143; see also Draft SEIS at 25 of 143 (noting that "recent data on distribution, abundance, or habitat use in the Chukchi Sea Planning Area are not available"). The original EIS acknowledges further that, even were distribution and use patterns better understood, the significance of bowhead use of areas to the overall food requirements of the population are not clear. See Draft SEIS, App. A at 24 of 143.

The original EIS's alternatives consisted of different sized coastal deferral zones. These different zones were proposed in part to provide different levels of protection for bowhead whales. See Minerals Management Service (MMS), Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Alaska, Final EIS, OCS EIS/EA MMS 2007-026 (FEIS) at ES-7-8 (May 2007) (explaining reasons for each alternative). Indeed one alternative, Alternative IV, was developed specifically to afford protection to migrating bowhead whales. *Id.* at ES-8. Given the reason for posting the various alternatives—to offer, among other things, varying levels of protection for the bowhead whales—information that would allow BOEMRE to analyze the importance of the deferred areas to the species is essential to the choice among those alternatives.

- The original EIS for Lease Sale 193 acknowledged that information about marine and coastal birds is outdated or completely lacking for the Chukchi Sea. Draft SEIS, App. A at 4 of 143 (noting that several areas historically documented to be important for birds, as well as the entire lease sale area "lack site-specific data on habitat-use patterns, routes, and timing to assess impacts"); *id.* (noting that for many species, "the most recent data is between 15 and 30 years old, making accurate analysis difficult"). Yet, "several species or species-groups have a high probability of experiencing substantial negative impacts" and "[t]he risk that several regional bird populations could experience significant adverse impacts is high" in the event of an oil spill. *Id.*

BOEMRE proposed one of the alternatives, Alternative III, at least in part to reduce impacts to marine and coastal birds. See FEIS at ES-8. Given the reason for the alternative, information about areas that are important to marine and coastal bird species, and information about how and when those birds use these areas, is essential to making a choice between this and other potentially less-protective alternatives.

In the face of missing information, BOEMRE was left in the original EIS to speculate about the different effects among alternatives. For example, the original EIS states that in Alternatives III and IV, "[t]he increased distance between offshore development and coastal bird habitats would conceivably decrease the percent chance of spilled oil contact, increase weathering of spilled oil prior to contact, and increase available spill response time." FEIS at IV-269, 273 (emphasis added); *id.* at II-42, 45 ("The increased distance between offshore development and coastal bird habitats also would conceivably decrease the percent chance of spilled oil contacting bird habitat . . .") (emphasis added). The alternatives analysis is replete with this sort of conjectural differentiation among alternatives. Conjectural language is used to describe different effects from oil spills on fish, fish habitat, bowhead whales, other marine and coastal birds, and terrestrial mammals. FEIS at IV-268-69 (Alternative III); *id.* at IV-272-73 (Alternative IV); see also *id.* at II-41, 45 ("Differences in noise and oil-spill effects to bowhead whales from this deferral compared to Alternative I [] and Alternative III/IV [] are difficult to quantify, but qualitatively can be described."); *id.* at II-42, 45 ("any spill that would occur would conceivably take longer to reach and enter the spring-migratory route"); *id.* ("The increased distance between offshore development and coastal habitats also would conceivably decrease the percent chance of spilled oil contact with marine mammals . . ."); *id.* at II-44 ("The increased distance between offshore development and coastal fish habitats also would conceivably decrease the percent chance of spilled oil contacting fish resources . . ."); *id.* at II-41 (noting that "[i]n theory" Alternative III provides more protection for coastal and marine fish habitat). Because better information would enable BOEMRE to perform an actual, rather than a conjectural, analysis of the differences among potential alternatives, it is essential to a reasoned choice among alternatives.

3. Missing information is essential to determining an adequate range of alternatives.

Missing information is essential to the choice among alternatives, because it is essential to the agency's definition of an adequate range of alternatives. NEPA requires that an EIS contain a detailed statement of the "alternatives to the proposed action." 42 U.S.C. § 4332(C)(iii). The

discussion of alternatives "is the heart of the environmental impact statement." 40 C.F.R. § 1502.14. That discussion should "provid[e] a clear basis for choice among options by the decisionmaker and the public." *Id.*; see *City of Angoon v. Hodel*, 803 F.2d 1016, 1020 (9th Cir. 1986) ("[T]he touchstone for our inquiry is whether an EIS's selection and discussion of alternatives fosters informed decision-making and informed public participation.") (quoting *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982)). BOEMRE has chosen not to reexamine the range of alternatives for the lease sale in the draft SEIS process. The agency should reconsider this approach. As agencies and conservation groups explained in commenting on the original EIS, missing information about the basic biology of the region and about the effects of oil and gas activities on the species that inhabit it is essential to framing an appropriate range of alternatives that have meaningfully different effects. Without this information, neither the agency nor the public could determine whether the range of alternatives presented in the original EIS was adequate. The lack of information, in other words, thwarted the discussion of alternatives to the proposed lease sale, undermining a central component of the NEPA analysis.

The original EIS alternatives consist of three different-sized deferrals of coastal areas from leasing (the first of which, Alternative I, is inconsistent with the 25-mile coastal buffer zone mandated by the 2007-12 Five-Year Leasing Program, pursuant to which Lease Sale 193 was to be held, and is thus not a viable alternative). Because so much information about the Chukchi Sea is missing, however, it is impossible to determine whether these alternatives would have a different effect on the environment much less describe to a decision-maker why and how. The Environmental Protection Agency (EPA) identified this flaw, commenting on the draft of the original EIS:

Alternatives to the Proposed Action that are presented in the Draft EIS include two variations of exclusion areas along the coastward side of the Planning Area. However, it is unclear how the boundaries of the excluded areas in the two alternatives (Alternatives III and IV) were determined. Due to the lack of information about the Planning Area, the use of the "Opportunity Index" and other assumptions regarding the potential level of exploration, development and production activity as a result of a lease sale, it is unclear if the two alternatives, together with the Proposed Action and a No Action Alternative, represent a range of reasonable alternatives in the Draft EIS. The Final EIS should present a more thorough discussion of the decision criteria and the geophysical, biological and subsistence information that was used to develop the alternatives in order to demonstrate that a range of reasonable alternatives was considered.

FEIS at 013-002. EPA also suggested that BOEMRE "consider removal of additional areas with sensitive fish and wildlife, subsistence, and cultural resources, and at a minimum, deferring areas until further research and studies are conducted to ensure development can occur without significant impacts to critical resources." FEIS at II-4. BOEMRE rejected these suggestions, in part because EPA did not provide specifics as to areas that should be considered for removal. *Id.* at II-5. EPA, of course, could not do so, given the lack of information in the Chukchi Sea. Absent adequate information, it is not possible to frame a meaningful range of alternatives for the decision-maker. Missing information that would allow the agency to frame alternatives that provide meaningful choices—namely information sufficient to identify "areas with sensitive fish

and wildlife, subsistence, and cultural resources” and to provide at least one action alternative that “ensure[s] development can occur without significant impacts to critical resources”—is clearly essential to a choice among alternatives.

In the draft SEIS, BOEMRE concludes that the effects under all the action alternatives presented in the original EIS are basically the same. Draft SEIS at 11 (noting the “commonality of potential impacts and their severity among all action alternatives, which substantially reduced the utility of incomplete information to the decision-maker”); *see also* FEIS at ES-8 (noting that “[t]he EIS analysis concludes that for most resources, while the alternative [III and IV] would provide a measure of protection to the resources within the deferral area, the effects to the resources in the Chukchi Sea area under this alternative would be essentially the same as the effects under Alternative I.”). This conclusion, if true, which it is not,¹ suggests only that the range of alternatives in the original EIS was inadequate. It highlights, rather than excuses, the essential nature of missing information to the choice among alternatives.

For example, BOEMRE stated in the original EIS that information about beluga whales was both important for the lease sale decision and missing from the analysis. It stated that “[u]nderstanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures.” FEIS at IV-163. But, “[l]ate-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified” *Id.* Rather than obtaining this information acknowledged in 2007 to be important to planning lease sales, BOEMRE in the draft SEIS attempts to excuse itself from that work with general boilerplate language. *See* Draft SEIS, App. A at 99 of 143 (stating that “[w]hile additional information on the distribution and timing of movements of belugas would be useful, this information is not essential to a reasoned choice among alternatives in this case” because “[m]uch information is already known on the general habits of the many species of birds [sic] that use the Chukchi Sea” [and] “this level of available information is sufficient to support sound scientific judgments and reasoned managerial decisions regarding formulation and selection of lease sale alternatives” and “[t]he protections that this species receives under the MMPA will serve to preclude or reduce impacts under all action alternatives”). These generalizations are not credible attempts to comply with Section 1502.22 with respect to information the agency itself has admitted is important for the decision-maker. As described in the next section, BOEMRE’s rationales do not justify the agency’s course.

C. BOEMRE’s reasons for not to obtain any missing information are arbitrary.

BOEMRE advances five recurring excuses for its decision not to obtain a single piece of information during the remand period. A key BOEMRE excuse for this extraordinary decision, that is both explicit and implicit in several rationales, is that missing information is not essential to the lease sale decision, because that decision is not a consequential commitment of areas to oil

¹ The original EIS does acknowledge generally some differences in effects to a number of species among the alternatives. *See* FEIS at IV-268-69. However, as described above, the real problem is that there is not enough information about the biology of the region or effects of oil and gas activities on its wildlife to determine whether the different alternatives will in fact have different effects or to fashion different alternatives that will in fact ensure different effects if chosen.

and gas activities. Thus, information can be obtained at later stages of the OCSLA process, when the agency is evaluating exploration or production plans.

As an initial matter, this rationale ignores the agency’s practice, which has been to conduct only abbreviated environmental assessments of exploration plans and to rely heavily in that review on the analyses the agency conducts at the lease sale stage. *See* MMS, Shell Gulf of Mexico, Inc., 2010 Exploration Drilling Program, Chukchi Sea OCS, Alaska, Environmental Assessment at 6-7 (December 2009); MMS, Shell Offshore Inc. 2010 OCS Exploration Plan, Camden Bay, Alaska, Environmental Assessment at 2-3 (October 2009). Under this practice, the need to gather information is always either pushed into the future or deemed unnecessary in light of past NEPA documents.

More fundamentally, BOEMRE’s excuses fail to recognize the importance of the decision being made at the lease sale. As described above, at the lease sale stage, BOEMRE makes the decision about whether to permit oil and gas activities in an area, and the existence of leases, once issued, considerably constrains the agency’s discretion to alter course. BOEMRE can, of course, deny lessees’ exploration and development plans, and it can suspend and even cancel leases after they are issued. But these actions may only be taken in compliance with the substantive and procedural constraints of OCSLA and its regulations. It is precisely at the lease sale stage—where the agency finds itself now—when it has full discretion to determine if, when, where, and how oil and gas activities may occur in a planning area, that information about the biological resources of an area and the effects of oil and gas activities on those resources is essential.

BOEMRE also misapprehend its obligation under NEPA in preparing the draft SEIS. The job of the SEIS is to inform the decision-maker and the public about the effects of the decision to offer oil and gas leases in the Chukchi Sea. To satisfy this obligation, BOEMRE must “prepare a ‘detailed statement’ covering the impact of particular actions on the environment, the environmental costs which might be avoided, and alternative measures which might alter the cost-benefit equation . . . to aid in the agencies’ own decision making process and to advise other interested agencies and the public of the environmental consequences of planned federal action.” *Calvert Cliffs’ Coordinating Comm., Inc. v. U. S. Atomic Energy Comm’n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971). “[T]he purpose of an [EIS] is to . . . produce an informed estimate of the environmental consequences.” *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) (quotation and citation omitted), and give the decision-maker a “clear idea how to visualize the environmental harms” of the proposed action, *Mass. v. Watt*, 716 F.2d 946, 949 (1st Cir. 1983).

Similarly, BOEMRE states that, although large quantities of data are missing about the Chukchi Sea, there is enough information available now for informed management and decision-making. Draft SEIS at 11. This excuse is unsupported. In most instances, BOEMRE makes this statement without pointing to the information that it relies on to make its management decision notwithstanding important data gaps. For example, the original EIS states that there is not enough information to determine whether or not there will be significant effects to marine mammals from oil and gas activities under the lease sale. FEIS at V-32. Yet, in the draft SEIS, without disputing the fact that it is unable to determine whether there will or will not be significant effects to marine mammals from oil and gas activities in the Chukchi Sea and without

pointing to any specific information at all, BOEMRE concludes that there is nonetheless enough information now to make management decisions. Draft SEIS, App. A at 136 of 143. BOEMRE’s statement boils down to a conclusion that it is not essential to the lease sale decision to know whether oil and gas activities that will result from the decision will or will not significantly affect Chukchi Sea marine mammals. This conclusion is not credible. It underscores the agency’s abnegation of its NEPA duties to describe in detail the “the actual impact of proposed projects.” *Earth Island Institute v. U.S. Forest Serv.*, 442 F.3d 1147, 1172 (9th Cir. 2006), in an EIS “to obviate the need for [] speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action.” *Found. for N. Am. Wild Sheep v. U.S. Dep’t of Agric.*, 681 F.2d 1172, 1179 (9th Cir. 1982).

Relatedly, BOEMRE states that it need not obtain additional information because other environmental laws and regulations would preclude significant adverse effects on particular resources. Again, BOEMRE misapprehends its obligations under NEPA. An agency may not rely on the imposition of future mitigation measures to avoid analyzing the impacts of an activity in an EIS. *See S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep’t of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (holding EIS violated NEPA because it failed to analyze a project’s air quality impacts in reliance on separate Clean Air Act permitting process); *see also Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1381 (9th Cir. 1998) (holding EIS discussion of mitigation inadequate in part because it was “not clear whether any mitigation measures would be adopted”); *Nat’l Parks & Conservation Ass’n v. Babbitt*, 241 F.3d 722, 734-35 (9th Cir. 2001). Furthermore, where an EIS relies on mitigation measures to avoid discussing potential effects, the mitigation measures must “be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.” *Neighbors of Cuddy Mountain*, 137 F.3d at 1380-81 (EIS violated NEPA where it failed to discuss “how effective the mitigation measures would be”); *Nat’l Parks & Conservation Ass’n*, 241 F.3d at 735 (“the impact of the proposed mitigation measures must be studied as part of the preparation of an EIS”). Neither the original EIS nor the draft SEIS discusses the future mitigation BOEMRE claims excuses analysis in any meaningful detail.

BOEMRE also states that it need not obtain further information about adverse impacts because it has disclosed that significant adverse effects would occur under certain circumstances, such as an oil spill, and further description of those effects is not necessary. Draft SEIS at 11. This excuse, however, fails to recognize the agency’s obligation to prepare a “detailed statement” that provides the decision-maker and public with a “clear idea how to visualize the environmental harms.” For example, the original EIS said in the context of discrete populations of fish: “Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected.” FEIS at II-34. The draft SEIS responds to this statement as follows: “[i]t is well understood that the environmental impacts associated with a large oil spill could be quite severe. Rare species could be affected by such an event wherever [sic] they may occur throughout the lease sale area . . . the decision-maker already has sufficient information regarding the relative probability and various impacts of a large oil spill to allow a reasoned choice among lease sale alternatives.” Draft SEIS, App. A at 2 of 134. Without information about what would happen in the event of an oil spill, including, for example, what species of fish might be extirpated, it is not possible for BOEMRE to create a detailed statement of the potential environmental harms that

could result from the lease sale and to provide the decision-maker and public with a clear picture of the potential impacts.

Finally, BOEMRE states that there is a “commonality” of effects among all action alternatives which “substantially reduced the utility of incomplete information to the decision-maker.” Draft SEIS at 11. As an initial matter, and as discussed above, the statement is not true—the original EIS acknowledges that there are differences among alternatives. The problem is that data gaps prevent meaningful distinction among those alternatives. Part of the problem is that the lack of information has led managers to consider the environment as being basically homogenous, which would be unprecedented for a continental shelf region with varying currents and topography (*i.e.*, shoals and canyons). Regions are likely to vary in their importance for a number of species. For example walrus appear to congregate regularly in the region around Hanna Shoal within the lease area. *See*, USGS 2010, *Walrus tracking and telemetry data acquired from walrus instrumented on the Alaska shores of the Chukchi Sea in September 2009*. Radio-tagging field report. USGS Alaska Science Center, Walrus research project. http://alaska.usgs.gov/science/biology/walrus/pdfs/EC09_Radio_Tagging_Field_Report.pdf. If information is lacking to allow BOEMRE to determine whether oil and gas activities will have significant effects on marine mammals, for instance, there is no way to describe in any detail the effects of any one alternative, let alone describe differences among different alternatives. Additionally, the statement ignores the comparison that the decision-maker must make between the action alternatives and the no-action alternatives. It also begs the question whether, if it is true that effects are the same for all alternatives, the original EIS presented an adequate range of alternatives.

D. Other flaws in BOEMRE’s analysis of missing information in the draft SEIS.

The draft SEIS suffers from a number of other flaws in its analysis of missing information. Exhibit 129 to the plaintiffs’ opening brief in *Native Village of Point Hope*, upon which BOEMRE purports to rely at least in part for its identification of missing information in Appendix A to the draft SEIS, identifies missing information related to threatened spectacled and Steller’s eiders. These identifications of missing data were contained in a biological evaluation that BOEMRE prepared in connection with its consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act. BOEMRE relied on the analyses in that biological evaluation in the original EIS. Thus, these unknowns must be addressed here in the draft SEIS.

The draft SEIS fails to include essential information that has been developed about the Chukchi Sea that BOEMRE itself has developed. This information includes information collected from the BOEMRE Environmental Studies Program in Alaska. The listing is available at: http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf (last visited Nov. 21, 2010). For example, attachment A documents those references from peer reviewed literature produced under the auspices of the study program since 1990 that BOEMRE failed to consider. BOEMRE must consider these studies, as some of these studies may contain information relevant to unknowns about species and habitats as well as the fates and effects of oil and gas exploration and development on these species and habitats.

The draft SEIS also failed to include essential information that has been developed about the Chukchi Sea between the completion of the original EIS in 2007 and the present. This information is also included in attachment B. One example of an important study that is already available and provides information essential to the lease sale decision but that BOEMRE has ignored is Quakenbush, L.T., Small, R.J., and Citta, J.J. 2010. Satellite tracking of western Arctic bowhead whales. Final Report. OCS study BOEMRE 2010-033. Bureau of Ocean Energy Management, Regulation and Enforcement. 65 pp plus appendices. The study pertains to the bowhead whale—an important marine mammal for the Inupiat along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the Endangered Species Act. The original EIS acknowledges that “[d]ata are limited on the bowhead whale fall migration through the Chukchi Sea before the whales move south into the Bering Sea,” and that “[r]ecent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available.” FEIS at III-51, III-55. The Quakenbush study identified important corridors for migration and potentially important feeding areas in the Chukchi Sea, information BOEMRE admits is missing and admits is relevant to potentially significant impacts from leasing. Draft SEIS, App. A at 25 of 143. BOEMRE should consider the information provided by these and other studies, such as recent walrus tagging data from the United States Geological Survey, that are already available but that it has neglected to incorporate into its analysis of Lease Sale 193 effects.

E. BOEMRE should reassess its approach, obtain essential missing information, and reconsider the lease sale decision in light of the new information.

BOEMRE should not finalize the draft SEIS as currently written. It should take a new approach and undertake a meaningful assessment of whether missing information is essential to a reasoned choice among alternatives, obtain the information that is, assess whether the new information merits different alternatives, and fully reconsider the Chukchi Sea lease sale in light of that new information.²

The most effective way to respond to the Court’s order and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This information will allow managers to move from qualitative assertions (*i.e.*, educated guesses) to making quantitative assessments of potential impacts. Information will allow decision makers to weigh the costs and benefits of industrial activities and determine whether there are alternatives that could allow for development while protecting the ecosystem and subsistence way of life. Obtaining information

² In public meetings on the draft SEIS, BOEMRE repeatedly stated that it has been instructed by the Alaska Federal District Court to complete its remand analysis by January 21, 2011. This statement is misleading. Although the Court stated its opinion that a “reasonable goal” for completion of the remand analysis would be January 21 and directed the agency to make reasonable efforts to respond to the remand by that date, it was careful to state that it was not “impos[ing] rigid or arbitrary constraints on the Agency” and explicitly “recognize[d] the Agency’s expertise in the field.” *Native Village of Point Hope*, Docket No. 171 at I-2. Accordingly, the Court instructed the agency to file a report with the Court as to the agency’s progress by January 21, 2011, if that date proves unrealistic to complete consideration of the issues on remand. BOEMRE should not use this date as an excuse to avoid conducting the analysis that is required under NEPA and Section 1502.22

now would also ensure that, if leases were sold, there would not be an information gap later in the process, when the agency is called upon to analyze and approve exploration and development plans on those leases. We are attaching hereto, as attachment C, a draft research plan that sets forth one possible approach to obtaining missing information that would be true to the Administration’s commitment to science-based decision-making.

Once it has obtained missing information and completed a meaningful reanalysis of the potential effects of Lease Sale 193, BOEMRE should, as it recognizes, Draft SEIS at 4 (“When the EIS process is completed the Secretary per the court’s remand will affirm or change the department’s previous Sale 193 decision.”), make anew its decision whether to cancel, modify, or amend the decision to hold Lease Sale 193. To protect the integrity of the administrative process and avoid “bureaucratic rationalization and bureaucratic momentum,” BOEMRE and the Department of Interior must not lend weight to the existence of outstanding leases in the Chukchi Sea—the prior decision to hold the lease sale must “count for nothing” in the present decision regarding Lease Sale 193. *Northern Cheyenne Tribe v. Hodel*, 851 F.2d 1152, 1157 (9th Cir. 1988).

II. ANALYSIS OF NATURAL GAS DEVELOPMENT

The draft SEIS’s analysis of the effects of natural gas development also falls short in a number of respects. It fails to adequately take into account climate change, its scenario is unjustifiably limited, its dismissal of liquefied natural gas (LNG) tankering is unjustified, it fails to adequately analyze the impacts of pipelines, it fails to adequately analyze the effects of natural gas production on a number of species, and it fails to analyze the potential for activities to displace subsistence users.

A. The draft SEIS fails to adequately take into account climate change.

The draft SEIS, like the original Lease Sale 193 EIS, fails to assess adequately the lease sale’s impacts in the context of Arctic climate change. It is essential that the final SEIS analyze the effects of gas development and production in light of Arctic climate change because the draft SEIS states that “the timeframe for all activities . . . could span 50 years,” and assumes that gas-related activities will occur during the latter portion of that period. Draft SEIS at 65. The Arctic at the time natural gas will be developed according to BOEMRE’s scenario will be a very different place than the Arctic of 2010.

The Arctic is undergoing rapid change. It is warming faster than any other place in the world. Among the most profound changes are the loss of sea ice, the melting of permafrost, and coastal erosion. As temperatures continue to rise and precipitation patterns change, species distributions will shift, and many species will experience increased stress and decreased chance of reproduction and survival. The listing of the polar bear due to warming-related habitat loss exemplifies the changing Arctic environment. Polar bears are spending more and more time on land and less time on ice where they hunt for prey, including seals. As a result, scientists predict that two-thirds of the world’s polar bear population could disappear by the middle of the century. The future looks similarly grim for walrus. Walrus are benthic feeders that use the ice as a platform from which to dive for food. Without sea ice, food will become much more difficult to access, leading to malnutrition and increased energy expenditures in searching for food.

The original Lease Sale 193 EIS failed to adequately take into account climate change. The EIS analyzed the proposed action against a static baseline and ignored likely changes in the Arctic climate and environment. *See, e.g.*, FEIS at III-47-55 (establishing the baseline for bowheads without accounting for climate change). As a result, the EIS included an incomplete analysis of climate change impacts to a number of rare and declining species, including polar bears, walrus, seals, and other marine mammals. FEIS at IV-145 – IV-171.

The draft SEIS makes the same error. It acknowledges that climate change is occurring. Draft SEIS at 32-33. Also, it indicates that changes in climate are irregular, making accurate projections difficult, but adds that “[c]limate change in the Arctic is projected to be larger than in other areas of the globe . . .” *Id.* at 33. It recognizes that “[t]he arctic sea ice is undergoing changes in extent, thickness, distribution, age, and melt duration . . .” *Id.* at 34. However, the draft SEIS fails to analyze the effects of Arctic gas production and development in the context of a changed and likely stressed environment.

Scientists predict that over the 50-year time frame of the lease sale activities, the Arctic could warm by more than three degrees Celsius as compared to a 1981 – 2000 baseline. ACIA, Arctic Climate Impact Assessment 2005, Cambridge University Press at 122 (Table 4.3), available at <http://www.acia.uaf.edu/pages/scientific.html>. As described above, Arctic warming will dramatically affect the Arctic environment and Arctic species. BOEMRE cannot provide a complete analysis of the effects of gas development and production without considering these changes. Thus, the final SEIS must account for the fact that in future decades the Arctic will be much different than it is today. The final SEIS’s analyses of effects to Arctic species, including marine mammals, polar bears and walrus, terrestrial mammals, and birds, should account for factors like diminished habitat, food resources, or population levels, and increased competition from species expanding their ranges into the Arctic.

BOEMRE should also analyze the impact of natural gas development’s contribution to black carbon emissions, for example from increased vessel traffic and development infrastructure. Black carbon is generally regarded as the second most important contributor to Arctic warming after CO₂. It warms the environment by absorbing solar radiation and heating the atmosphere, and it darkens snow and ice after falling to earth, thus increasing absorption and reducing the reflection of sunlight and accelerating melting. EPA Ad Hoc Working Group, Current Policies, Emission Trends and Mitigation Options for Black Carbon in the Arctic Region at 7 (April 28, 2009), available at <http://iiasa.ac.at/rains/reports/DRAFTWhitePaper-BCArcticMitigation-280909.pdf>. Emissions of black carbon from sources in the Arctic itself are particularly troubling, as Arctic emissions are far more likely to come in contact with and accelerate melt of Arctic snow and ice. *See id.* at 20. One recent study indicates that Arctic black carbon emissions are 10 to 100 times more important with respect to contributing to Arctic black carbon radiative forcing than emissions outside of the Arctic. Hirdman et al., Source identification of short-lived air pollutants in the Arctic using statistical analysis of measurement data and particle dispersion model output, 10 Atmos. Chem. Phys. 669 (Jan. 2010), available at <http://www.atmos-chem-phys.net/10/669/2010/acp-10-669-2010.pdf>. BOEMRE should analyze these effects.

B. The Draft SEIS arbitrarily assumes no additional seismic or exploration drilling will occur in the natural gas development scenario.

In the draft SEIS, BOEMRE arbitrarily assumes that gas development and production would entail no additional seismic surveying or exploration drilling. Draft SEIS at 65. The scenario forms the basis of the agency’s analysis in the EIS. Thus, an arbitrary scenario infects the entire analysis of effects throughout the EIS. In the draft SEIS, BOEMRE has projected Chukchi Sea gas development and production in a manner that ensures effects will be essentially no different than the effects of projected oil development and production in the original EIS. Draft SEIS at 65.

BOEMRE’s limited gas scenario is arbitrary. BOEMRE assumes that gas development will result in no additional exploration activities because gas development will remain much less financially attractive than oil development. Draft SEIS at 65. However, even if gas development remains less attractive than oil development, this does not justify BOEMRE’s assumption that gas activities would not involve additional seismic surveying or drilling. Indeed, this assumption is contrary to the agency’s past statements on the attractiveness and probability of gas development. In the 2008 Multi-Sale Draft EIS, BOEMRE stated that an operational gas pipeline would “encourage new exploration, development, and production of natural gas throughout northern Alaska, including the Arctic OCS.” MMS, Beaufort Sea and Chukchi Sea Planning Areas, Oil and Gas Lease Sales 209, 212, 217, and 221, Draft EIS, App. E at E-4 (November 2008) (Multi-Sale Draft EIS) (stated in the context of discussing Beaufort Sea gas). Also, in the administrative record for Lease Sale 193 BOEMRE recognized that some companies could be even more interested in gas than oil in the Chukchi Sea and the agency noted that billions of dollars in royalties and taxes could be lost if companies did not develop marginal gas projects. Email from James Craig, BOEMRE, to John Goll, Re: Chukchi PNOS at 3 (March 19, 2007). A BOEMRE evaluation of Chukchi Sea lease sale scenarios plainly stated that “including gas development in the scenario will greatly increase potential environmental impacts *because the number of wells and platforms will be greater. . . .*” Email from James Craig, BOEMRE, to Rance Wall, Re: My response to Shell’s request to change the Chukchi scenario at 3 (Dec. 13, 2005).

A pipeline stretching from the Chukchi Sea to the main transport hub near Prudhoe Bay may also provide an incentive to gas companies to perform additional exploration. The Chukchi Sea could contain considerable natural gas reserves. Multi-Sale Draft EIS, App. E at E-5, E-3 (stating that undiscovered gas resources in the Chukchi Sea range from 10.3-209.5 Tcf, while such resources in the Beaufort Sea range from 0.6-72.2 Tcf). While the gas may presently be less valuable than oil, the presence of a pipeline to transport gas to market could make any Chukchi Sea gas field commercially viable. This could cause companies to develop more gas, as well as oil found in the ground with the gas. It is arbitrary for BOEMRE to ignore this incentive and the possibility that a gas pipeline could transform the value of developing a gas and oil field from marginally unprofitable to lucrative.

Moreover, it is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future. The International Energy Agency predicts that global demand for natural gas will increase 44 percent between 2008 and 2035, and that this increase in demand

will end current conditions of oversupply and low price. See <http://www.alaskadispatch.com/dispatches/alaska-beat/88-alaska-beat/7471-ia-nat-gas-demand-to-rise-14-yearly-over-long-term>. Additionally, future attempts to mitigate climate change could further boost demand for natural gas because gas is a relatively clean fossil fuel when compared to oil.

Thus, it is reasonably foreseeable that natural gas leasing in the Chukchi Sea will result in additional exploration and development activities. BOEMRE's failure to account for this in the draft SEIS is arbitrary, and the agency must remedy this omission in the final SEIS. The agency must consider the effects of additional exploration and development, such as noise disturbances to bowhead whales and walrus from increased seismic activities, drilling, and icebreaking, the increased risk of birds striking oil and gas structures, potential air and water discharges from natural gas drilling, and increased risk of a large oil spill occurring if natural gas development results in additional oil development.

C. BOEMRE's dismissal of liquefied natural gas tankering is arbitrary.

As in the original Lease Sale 193 EIS, the draft SEIS arbitrarily fails to analyze the effects of LNG tankering. In the Lease Sale 193 EIS, BOEMRE refused to analyze the effects of LNG tankering by arguing that the method of bringing natural gas to market was not feasible or economically attractive, even though record evidence indicates that LNG tankering is not only feasible, but is also drawing industry interest. In the draft SEIS BOEMRE continues to ignore the record evidence indicating the potential for LNG tankering in the Chukchi Sea. Instead of grappling with this evidence, BOEMRE simply repeats its Lease Sale 193 EIS conclusion that LNG tankering is not feasible or economically attractive. Draft SEIS at 15.

BOEMRE should analyze the effects of LNG tankering. The record shows that LNG tankering, is a feasible option that BOEMRE has promoted and industry has showed an interest in. In the 2008 draft Multi-Sale EIS, BOEMRE stated that "LNG is a plausible . . . strategy to export gas from the Chukchi OCS." Multi-Sale Draft EIS, App. E at E-6. In its presentations to the North Slope Borough on Lease Sale 193, BOEMRE indicated that LNG tankering was a possible development scenario. Chukchi Development Presentation at 5. Further, in commenting on [BOEMRE]'s Notice of Intent to prepare the EIS for Lease Sale 193, Shell recommended that in addition to effects of a gas pipeline, LNG tankering "should also be analyzed." Shell E&P Company, Comments on Notice of Intent to Prepare an EIS on Proposed Chukchi Sea Lease Sale 193 at 2 (December 9, 2005).

An analysis of LNG tankering is essential because these activities could have substantial effects on the environment. The infrastructure and activities associated with LNG transport could affect large areas of the land and ocean. Facilities—including a major LNG plant—and activities on shore could disturb local species and destroy local habitat, including threatened and endangered birds. Also, LNG transport could significantly increase vessel traffic in the Chukchi and Bering seas. Increased noise from these vessels could harm pinnipeds and migrating bowhead whales, and disturbances of sea ice could have an impact on polar bears, walrus, and other species that depend on the ice for habitat.

Vessels transporting the LNG to market through the Bering Sea could negatively affect the critically endangered North Pacific right whale, one of the most endangered whales in the world. It is essential that BOEMRE consider the possibility that boat strikes could result in mortality to right whales because the loss of any North Pacific right whale would be a significant effect.

Additionally, LNG tankering could greatly increase Arctic emissions of black carbon and contribute to Arctic warming. BOEMRE should analyze these effects.

Thus, given the feasibility of LNG tankering, MMS's own promotion of the technology during the process leading to the original Lease Sale 193, industry interest in it, and the potentially significant impacts of LNG tankering, BOEMRE must include an analysis of the effects of LNG tankering in the final SEIS.

D. BOEMRE has not sufficiently analyzed the effects of the construction and operation of pipelines resulting from natural gas development.

The effects of a gas pipeline spanning from offshore in the Chukchi Sea to near Prudhoe Bay have never been analyzed. Neither the original Lease Sale 193 EIS nor the draft SEIS adequately analyzes the potential effects of a hundreds-mile long pipeline traversing diverse habitat for caribou and other species in across the National Petroleum Reserve—Alaska (NPR-A).

As an initial matter, the original Lease Sale 193 EIS's analysis of an oil pipeline does not provide the necessary analysis of the effects of a gas pipeline. Even if the gas pipeline travels the same corridor as the oil pipeline discussed in the original EIS, the later time frame BOEMRE has identified for gas development will result in the construction of the gas pipeline at a later date. Also, a second pipeline and additional compression facilities and maintenance activities will result in other effects, both individually and cumulatively with oil-related activities.

The final SEIS for Lease Sale 193 must consider the effects that a gas pipeline and its associated facilities and activities could have, in conjunction with oil production and development activities, on the Arctic environment. However, the draft SEIS provides no more than a cursory and incomplete analysis of the effects of the construction and operation of a gas pipeline. Instead of providing a detailed analysis, the draft SEIS relies on later analyses and permitting processes to identify and prevent environmental harms. See, e.g., Draft SEIS at 81-82 (noting that the construction and operation of a pipeline is noisy and can disturb threatened and endangered whales, but relying on later analyses and permitting to identify and prevent impacts). This does not satisfy NEPA; BOEMRE must take a hard look at the environmental effects of the lease sale before moving forward. Information about the biological resources of an area and the effects of oil and gas activities on those resources is essential at the lease sale stage because it is at this stage that the agency has discretion to determine if, when, where, and how oil and gas activities may occur in a planning area. Thus, only now can BOEMRE consider the entire scope of the lease sale and how the action as a whole could affect the Arctic environment and have that analysis inform the agency's decision making. At later stages, the agency will already be invested in particular courses of action, and its discretion may be more constrained.

In particular, the draft SEIS does not sufficiently analyze the potential effect a gas pipeline over land could have on caribou. The agency provides only two sentences on this topic, concluding that an elevated pipeline will not prevent caribou movements and stating that "[p]ipelines without adjacent roads and vehicle traffic are not likely to affect caribou movements." Draft SEIS at 89. BOEMRE should provide a more detailed analysis of the potential for onshore activities to disturb caribou, including a review of the potential for a natural gas pipeline to delay caribou movements and the effect that would have on caribou herds and individuals.

A large pipeline stretching across the NPR-A could have important adverse impacts. For example, the Bureau of Land Management (BLM) has considered the effects of smaller pipelines—ones stretching across only part of the NPR-A—in its EISs analyzing potential effects of different management strategies for the NPR-A. BLM, Northwest National Petroleum Reserve-Alaska, Final Integrated Activity Plan/Environmental Impact Statement (November 2003) (*available at* http://www.blm.gov/ak/st/en/prog/planning/npra_general/nw_npra/nw_npra-a_final_iap.html) (NW NPR-A IAAP/EIS); BLM, Northeast National Petroleum Reserve-Alaska, Final Supplemental Integrated Activity Plan/Environmental Impact Statement (April 2008), *available at* http://www.blm.gov/ak/st/en/prog/planning/npra_general/ne_npra/northeast_npra-a_final.html) (NE NPR-A IAP/EIS). The BLM identified numerous potential adverse effects of even these much less extensive pipelines. The BLM indicates that onshore oil and gas activities, and especially roads, can displace caribou and reduce caribou densities for miles. NE NPR-A IAP/EIS at 4-161. Further, it states that "there could be reproductive consequences from extensive disruption of caribou [movement] during the insect-relief season." *Id.* at 4-162. This is contrary to BOEMRE's statement in the draft SEIS that caribou are tolerant of development and its conclusion that caribou are able to habituate to oil and gas activities. Draft SEIS at 90. The BLM has also identified particular problems with pipelines themselves. It states that snow drifts under a pipeline can block or interrupt caribou movements. NW NPR-A IAP/EIS at IV-193. It also indicated that parallel sets of pipelines can lengthen crossing delays, NE NPR-A IAP/EIS at 4-171, as can roads that are adjacent to a pipeline, especially when there is high traffic on the adjacent roads, NW NPR-A IAP/EIS at IV-193. In some cases, caribou "may be delayed in crossing a pipeline and road for several minutes or hours in period of heavy traffic." *Id.* "[T]he energetic costs associated with such delays are unknown." NW NPR-A IAP/EIS at IV-193.

Moreover, the final SEIS should provide a more comprehensive review of relevant research on the effects of oil and gas development on caribou. For example, in the draft SEIS, BOEMRE cites a study from 2000 indicating that onshore development and production have not resulted in population-level effects. Draft SEIS at 90. However, a later report from the National Research Council found that

[a]s a result of conflicts with industrial activity during calving and an interaction of disturbance with the stress of summer insect harassment, reproductive success of Central Arctic Herd female caribou in contact with oil development from 1988 through 2001 was lower than for undisturbed females, contributing to an overall reduction in herd productivity.

National Research Council, Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope at 116 (2003).

BOEMRE also has not provided sufficient analysis of the effects the construction of a gas pipeline from offshore facility to shore would have on marine mammals. For instance, BOEMRE recognizes that noise from the construction of a gas pipeline can be quite loud, and as a result, can affect threatened and endangered whales. Draft SEIS at 81. The agency, however, states that because construction activities will be slow moving, the whales will be able to avoid the construction area and avoid harm. *Id.* The Draft SEIS also recognizes that noise from the construction of a pipeline can disturb seals, whales, and walrus, but provides only a minimal description of potential harm, and relies on later processes to prevent these harms. *Id.* at 87-88. This does not constitute the hard look NEPA requires. The agency mentions that harm may occur to these species, but fails to analyze the relevance of this harm. The agency states that whales will avoid pipeline construction, but does not discuss whether the construction will be excluding whales from important habitat and how this may affect individuals or the species. Similarly, while the agency presumes that harm to seals and walrus can be avoided, it fails completely to consider the potential for construction activities to occur near important habitat. In the final SEIS, BOEMRE should perform a complete analysis of the potential effects of the construction of a natural gas pipeline that takes into account the locations of important marine mammal habitat and the cost of excluding animals from that habitat.

E. BOEMRE fails to adequately analyze the effects of natural gas development on Arctic species.

BOEMRE has not adequately analyzed the effects gas development and production operations will have on various Arctic species. The review of the effects of these activities provides very little data or actual analysis to support the conclusions. BOEMRE in large part attempts to avoid the need to obtain data and to perform analyses by stating that analyses at later OCSLA stages can protect health, wildlife, and the Arctic environment. This is insufficient. BOEMRE must take a hard look at the impact gas operations will have on Arctic species, including birds, at the lease sale stage.

The draft SEIS fails to sufficiently consider impacts to polar bears. Significantly, the analysis fails to account for changes in the Arctic climate and ice extent and how this will affect polar bears. It states that "[d]uring the open-water season, most polar bears remain offshore on the pack ice." Draft SEIS at 83 (quoting FWS 2009 Biological Opinion). The draft SEIS also assumes that vessel-bear interactions usually result in short-term behavior disturbances. *Id.* at 83. These assumptions ignore data showing that the disappearance of Arctic sea ice is forcing polar bears to spend increasing time in open water, and to travel farther to find prey species, such as seals. Vessels may encounter bears that are hungry and weak either on ice or in the open ocean; fleeing from a vessel may constitute a very harmful energetic cost to a weak polar bear, especially one that has already spent much time swimming in the open ocean. The draft SEIS's analysis of disturbances to polar bears also fails to recognize that the melting ice is forcing bears to spend additional time on land, and that due to a lack of access to sea ice hunting habitat, many of these bears will be very hungry, and perhaps starving. Because oil and gas facilities can draw hungry bears, gas development and production could increase bear disturbances and human-bear

encounters. BOEMRE recognizes that human-bear interactions can result in harassment of the bear, but fails to sufficiently consider the cost of such disturbances to the bear. *Id.* at 83-84. Of particular concern is the potential for these interactions to endanger the life of a human or a bear. For instance, a human-bear encounter may lead to injuries or deaths to workers or an urgent need to protect a worker that results in the killing of a bear. The final SEIS should provide a comprehensive analysis of these and other relevant potential effects to polar bears, and should consider such impacts in light of the changing Arctic climate and environment.

The final SEIS should also provide additional analyses of effects to walrus. BOEMRE acknowledges that “the potential for serious adverse impacts to individual or groups of walrus does exist.” Draft SEIS at 88, and has noted that the population of Alaskan Pacific walrus is likely to decline, FEIS at III-74; however, the draft SEIS provides only a very brief analysis of potential impacts to walrus. Draft SEIS at 88. As with the EIS’s analysis for other species, it assumes that later permitting processes and mitigation measures will prevent harm. *Id.* However, even the short analysis BOEMRE has provided shows this to be arbitrary. The agency states that aircraft overflights can result in mortality from trampling and the separation of cow-calf pairs, but argues that “BOEM’s minimum altitude requirements would preclude adverse impacts to walrus, to the extent that human safety considerations permit flying at this altitude.” *Id.* Thus, BOEMRE’s own analysis shows that human safety considerations may result in aircraft flying at an altitude that can startle walrus and cause walrus mortalities. In fact, low-ceiling clouds in the Arctic prevent compliance with the minimum altitude requirements with some frequency. However, BOEMRE essentially ignores this potential harm and refuses to analyze whether resulting injuries or mortalities could result in population-level effects. BOEMRE also states that vessels can cause walrus to abandon haulouts, but does not address further the potential for vessels to disturb walrus. BOEMRE should provide an analysis of the potential for vessel disturbances to harm walrus. The draft SEIS does not consider any other potential disturbances to walrus. However, as discussed *supra*, gas production and development will require the construction of offshore pipelines and likely will result in additional exploration and development activity. BOEMRE must remedy these deficiencies by providing a complete analysis of potential effects to walrus in the final SEIS that includes a discussion of all relevant impacts.

BOEMRE also has not sufficiently analyzed the effects of gas development and production on birds. Gas development and production will require an onshore facility and onshore and offshore pipelines. Draft SEIS at 86, and “could entail relatively large-scale activity” *Id.* at 87. BOEMRE attempts to avoid substantive analysis by stating that later analyses and permitting processes will prevent impacts to birds. The agency should analyze the effects that disturbance could have on specific species of bird, including threatened and endangered species, and should not simply rely on conclusory statements of no significant impact, as it has done in the draft SEIS. Also, the draft SEIS fails to consider how increased predation due to predator attraction to natural gas operations will affect bird species, even though it also acknowledges that development infrastructure can increase concentrations of arctic foxes, which prey on birds and bird eggs. Draft SEIS at 86-87, 91. The final SEIS should analyze potential effects of increased predation.

F. BOEMRE fails to adequately analyze the potential for gas development and production activities to displace subsistence users.

The final SEIS should consider the potential for gas development and production activities to displace subsistence activities. The draft SEIS’s analysis of effects to subsistence-harvest patterns is largely restricted to the potential for activities to restrict access to resources through reductions in the resources themselves or changes in the distribution of those resources. Draft SEIS at 95-98. As detailed elsewhere, BOEMRE’s consideration of effects to Arctic species—including subsistence species—is lacking. However, beyond those issues, BOEMRE has also failed to consider the potential for gas development to displace subsistence users. BLM detailed some relevant subsistence displacement concerns in its Northeast NPR-A Supplemental IAP/EIS. Subsistence users have identified numerous reasons why they might avoid areas in response to industrial development. These reasons include a lack of cultural privacy, belief that resource are contaminated, reduced resource productivity in an area, and physical obstacles. NE NPR-A IAP/EIS at 3-135. Natural gas development resulting from Lease Sale 193 has the potential to result in large scale and far reaching industrial activities that could displace subsistence users from vast expanses of subsistence lands as occurred during development of the Prudhoe Bay region. See Wrenham, A. 2007. Inupiat health and proposed Alaskan oil development; Impact of the first integrated Health Impact Assessment/Environmental Impact Statement for proposed oil development on Alaska’s North Slope. EcoHealth 4:500-513. In the final SEIS, BOEMRE should analyze the potential for gas development and production to have such an effect.

III. NEW INFORMATION FROM THE DEEPWATER HORIZON SPILL

BOEMRE states in the draft SEIS that it need not consider the *Deepwater Horizon* spill in the Gulf of Mexico because it is beyond the scope of the remand. Draft SEIS at 16. Alternatively, BOEMRE states that the Gulf spill need not be incorporated into the Chukchi Sea lease sale analysis because (i) it has not changed baseline conditions in the Chukchi Sea, since it occurred in the Gulf of Mexico, (ii) it occurred in deep water and the Chukchi Sea lease sale area is predominantly shallow water, and (iii) “any change in likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed” in the original EIS. *Id.* These reasons are unavailing, and BOEMRE should analyze new information from the spill that is still being developed by, for example, the Presidential commission on the *Deepwater Horizon* spill.

NEPA compels supplementation of environmental impact analyses when “there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii); see also *Idaho Sporting Cong., Inc. v. Alexander*, 222 F.3d 562, 566 n.2 (9th Cir. 2000). The events surrounding the *Deepwater Horizon* spill provide significant new information that requires BOEMRE to supplement its analysis of lease sale 193. See, e.g., Council on Environmental Quality, Report Regarding the Minerals Management Service’s National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (Aug. 16, 2010) at 32, available at <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf> (stating “The BP Oil Spill constitutes significant new information and circumstances that may

require reevaluation of some conclusions reached in prior NEPA reviews and other environmental analyses and studies”). Fundamentally, the oil spill in the Gulf shows that that large spills from exploration drilling can happen and that, even in the relatively benign conditions of the Gulf, they cannot be contained. These facts alone fundamentally undermine BOEMRE’s assumptions about oil spills in the original EIS. In the original EIS, for instance, BOEMRE concludes that no oil spill would occur during exploration drilling. FEIS, App. A at A.1-1-A.1-2. Any oil spill would occur only during development and production. *Id.* The *Deepwater Horizon* spill shows that, even with the latest technology, oil spills do, in fact, occur during exploration. In addition, the spills analyzed in the original EIS—a 1,500 barrel oil spill from a production facility and a 4,600 barrel oil spill from a pipeline, FEIS at IV-19—are less than 1/1000 the size of the *Deepwater Horizon* spill—estimated by the Presidential commission investigating the *Deepwater Horizon* spill at close to 5,000,000 barrels of oil. See National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, *The Amount and the Fate of the Oil*, Draft, Staff Working Paper No.3 at 16 (Oct. 6, 2010). The original EIS does not analyze a large blowout spill. In light of the *Deepwater Horizon*, BOEMRE cannot dismiss a blowout spill as not reasonably foreseeable. In addition, BOEMRE must supplement its analysis of oil spill prevention and containment to reflect the lessons being learned from the spill and its aftermath, including the effects of dispersants.

CONCLUSION

BOEMRE should not finalize the draft SEIS in its current. With respect to missing information, BOEMRE should reassess whether there is essential missing information, taking into consideration the ongoing United States Geological Survey analysis of Arctic data gaps. It should obtain information that is essential to a lease sale decision, most effectively by engaging in a comprehensive and integrated research program. It should then prepare a revised draft SEIS that analyzes Lease Sale 193 in light of this new information. With respect to its analysis of natural gas development, BOEMRE should revise its assumptions and improve its analysis as described above. Once it has prepared an adequate and informative draft SEIS, it should make the document available for public comment. Thereafter, the agency should consider anew in light of this new information whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

Respectfully,

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Table of Attachments

Attachment A

Description

- A Peer Reviewed Publications for MMS Funded Projects (1990-Present) missing from the SEIS and FEIS for Chukchi 193
- B List of recent studies that should be considered in the SEIS
- C A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning (DRAFT)

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Peer-reviewed Publications for MMS Funded Projects (1990-Present) missing from the SEIS and FEIS for Chukchi 193 (http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf)

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Attachment B

List of recent studies that should be considered in the SEIS

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A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning

Introduction

The United States is at a crossroads with respect to planning and decision-making for offshore oil and gas activities in the Chukchi and Beaufort seas. President Obama and the Department of the Interior (DOI) must decide whether to continue with plans and approvals that are based on inadequate science and have generated controversy, litigation, and—as the blowout in the Gulf of Mexico demonstrates—the potential for environmental and social disaster. This document and the attachments provide a path forward that would use a comprehensive, integrated scientific research and monitoring plan to fill the gaps identified by scientists and courts and provide the necessary baseline information from which to make effective decisions.

At the heart of the controversy about offshore drilling in the Arctic is the widely acknowledged lack of scientific information about the Arctic Ocean. While we do know that the Arctic Ocean is important to life in coastal communities, has regions of high productivity that support varied ecosystems with iconic species of wildlife, helps regulate the planet's weather and climate, and is changing rapidly, scientists know very little about how the Arctic Ocean functions or the ways in which it might respond to stresses from industrial activities. The lack of baseline information about the marine ecosystem was one of the bases for court decisions invalidating the 2007-12 Five-Year Leasing Program and Lease Sale 193 in the Chukchi Sea. Without this understanding, it is not possible to comply with statutory and regulatory mandates that were established to help ensure responsible stewardship of resources, including the Outer Continental Shelf Lands Act (OCSLA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA)

Moreover, the lack of baseline information creates a significant impediment to both effective planning and preparation. The U.S. Commission on Ocean Policy stated as a principle tenet, "Ocean managers and policy makers need comprehensive scientific information about the ocean and its environment to make wise decisions."¹ The final recommendations of the Interagency Ocean Policy Task Force (OPTF) call for science-based decision making and a better understanding of our ocean ecosystems, including a special emphasis on the Arctic.² The Obama administration implemented the final OPTF recommendations and has both the opportunity and obligation to obtain the necessary science and use it to guide decisions about industrial activities.³ By deferring future leasing in the Chukchi and Beaufort seas, calling for the U.S. Geological Survey Arctic (USGS) gap analysis, committing to science in the NOAA Arctic Strategic Plan, and creating the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the Obama administration has taken important steps toward allowing for comprehensive science and planning. At the same time, the government is in the process of determining how to respond to the court-ordered re-evaluation of Lease Sale 193 and the 2007-12 Five-Year Leasing Program, and Congress is debating legislation that includes provisions for better science in the Arctic.

The most effective way to respond to the courts' orders and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This research has not been done adequately before, and much of what has been done is decades out of date in a region that is changing rapidly. While it is true that DOI and industry have undertaken significant research, those efforts have been narrowly focused, applied

studies designed to answer individual questions. Similarly, the National Science Foundation has funded significant cutting edge, hypothesis-driven basic research. While these efforts bolster our understanding of some processes in limited areas, they have not been conducted at the scale necessary to provide the holistic understanding of the ecosystem needed to make wise decisions about if and how industrial activities should proceed. Nor have they been conducted year-round—almost all of the existing studies focused solely on the summer months. The needed information is best obtained through year-round monitoring (including sampling for species distributions and abundance) and interdisciplinary research to elaborate trophic relationships, ecosystem structure and functioning, and other interactions.

Moving from uncoordinated studies to planned, integrated research would provide the necessary information, affordably, in a reasonable amount of time. In fact, the USGS gap analysis study, which has already started, could be the initial step. The results of that study—which should identify some of the largest and most pressing information gaps—should be used to help design the research program. The largest and most important information gaps almost certainly could be filled in 5-7 years for approximately \$20 million annually. Given the \$2.7 billion in revenue generated from Lease Sale 193 alone and the immense risks from oil and gas activities, this cost is neither exorbitant nor unwarranted. Such a comprehensive plan would provide many of the answers to the unknowns identified in the court proceedings relevant to Lease Sale 193 and the 2007-12 Five-Year Leasing Program and would provide the necessary information to make informed decision about whether to allow industrial activities and, if so, under what conditions.

State of Science About the Arctic Ocean

Very little is known about the Arctic Ocean, and in particular the Chukchi Sea. According to the U.S. Arctic Research Commission, the Arctic is "the least studied and most poorly understood area on Earth."⁴ In particular, "The Arctic Ocean is the least well known ocean on the planet. We know more about the topography of the planets Venus and Mars than we do about the bathymetry of the Arctic Ocean."⁵ Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. We recognize that the recent losses of sea ice during summer are fundamentally changing these ecosystems, but we still know little about the abundance and distribution of common species much less how the food webs work in this region.⁶

As part of the Lease Sale 193 litigation, the plaintiffs compiled a 38-page appendix of quotations from the Environmental Impact Statement that recognize the lack of available information about the Chukchi Sea.⁷ These citations are explicit recognitions by DOI and NOAA that there is significant missing information about even the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals and birds—which in other regions are typically the most highly studied animals of an ecosystem. The missing information for these species includes abundance, distribution, and life history. This lack of basic information makes it difficult, if not impossible, to determine whether there will be significant impacts to the animals and the ecosystem. The state of information about the more charismatic animals in the ecosystem is further evidence of the lack of

⁴ U.S. Arctic Research Commission, Report on Goals and Objectives for Arctic Research at "A Message from the Chair" (2005), available at <http://www.arctic.gov/files/USARCReportOnGoals2005.pdf>.

⁵ *Id.* at 6-7.

⁶ See Arctic Climate Impact Assessment, IMPACTS OF A WARMING ARCTIC 8, 10, 14-15, 24, 58-61 (2004); National Marine Fishery Service, Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis For the Arctic Fishery Management Plan And Amendment 29 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs 79-90, 99-105, 192, available at <http://www.fakr.noaa.gov/analyses/arctic/eariffr0809final.pdf>. (hereinafter "Arctic FMP EA").

⁷ This appendix is Attachment 2 to this document.

information about the rest of the ecosystem, including the clams, worms, sea stars and other species that are important prey for the more conspicuous species.

The lack of baseline science has also been highlighted by several other prominent local and federal agencies as well as international forums. In its comments on the Draft Proposed 2010-15 Five-Year Leasing Program, NOAA recommended using a precautionary approach to oil and gas activities for the Chukchi and Beaufort seas that prevents those activities until more information is available to support sustainable management.⁸ The Arctic Climate Impact Assessment, an international project of the Arctic Council and the International Arctic Science Committee, highlighted basic surveys and monitoring as well as ecosystem-based research as some of the highest priority research actions needed for Arctic marine waters.⁹ Further, the North Slope Borough has called for better baseline science to guide decisions, and Senator Begich has introduced legislation that calls for additional Arctic research and coordination.¹⁰

Moreover, where basic information about the marine ecosystem exists, much of it is old, spotty, and too sparse. For example, the Environmental Assessment for the Arctic Fishery Management Plan states that "data were scarce for estimating the abundance and biomass of fishes in the Alaskan Arctic."¹¹ The review of potential data sources indicated that surveys for fish have occurred about every 15-20 years, but typically over different regions. Even if those surveys over the past 60 years were combined together (which would be inappropriate due to different sampling methodologies and other reasons), there are still major areas of the U.S. Arctic Ocean shelf region that have yet to be surveyed. These areas include those where commercial fisheries could reasonably be expected to develop and those within lease sale areas.

Additionally, the vast majority of existing studies have been conducted in summer months. We need a year-round understanding of the Arctic Ocean ecosystem. One stunning example of this is a seabird, the spectacled Eider. In the summer their population would be widely dispersed, but in the winter, the entire world's population gathers together in a small area of the northern Bering Sea. If studies on this bird were only conducted in the summer, it would result in erroneous conclusions about the impacts of activities on this species, especially if activities occurred at or near their winter gathering area.

In addition, the Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impact statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Much of the environmental data input to the model is old; for example, current and wind information dates from 1979-1996. More sophisticated models are available and better information would allow for more effective analysis of the risks from spilled oil.¹²

While significant resources have been dedicated to studying particular Arctic animals and potential impacts to those animals from offshore oil and gas activities, we still lack critical baseline information about the ecosystem. The only studies designed to provide the comprehensive information and understanding of the health, biodiversity, and functioning of Arctic marine ecosystems and the potential impacts of industrial activities were conducted 30 years ago pursuant to the Outer Continental Shelf Environmental Assessment Program (OCSEAP). The information gained under that program did not initially cover the Chukchi Sea lease area and is so outdated as to be of very limited use in making decisions now for the Beaufort Sea.

⁸ See Letter from Jane Lubchenco, Ph.D. to S. Elizabeth Birnbaum, Re: Comments on the Interior Minerals Management Service Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015 (Sept. 9, 2009), at 5, available at http://www.peer.org/news/news_id.php?row_id=1265.

⁹ See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).

¹⁰ See S. 1562, 111th Cong. (2010).

¹¹ Arctic FMP EA at 99.

¹² These problems are explained in more detail in Attachment 3 to this document.

all data and methods for all research projects are made available to the public, it is impossible to give selective results credence in the decisions about oil and gas activities.

Ultimately, when considered with the long list of studies performed over the last 15 years, the 38-page index of recognized unknowns about the Lease Sale 193 area is indicative of a systemic problem with the way research is being conducted in the Arctic. As a result of the narrow focus on applied research questions, while baseline research and monitoring is ignored, large sums have been spent to provide information about specific issues without providing decision-makers the information needed to make informed decisions about Arctic resources. One or two specific studies will not solve this problem. Rather, a more holistic research program is needed to fill the important information gaps related to almost every aspect of the ecosystem.

An Interdisciplinary, Integrated Research and Monitoring Program for the U.S. Arctic Ocean

At this point, it is incontrovertible that there are: substantial information gaps about Arctic marine ecosystems, a laundry list of studies that have been conducted, ongoing processes at BOEMRE in response to court orders to supplement the Lease Sale 193 EIS to better account for missing science and to revise the environmental sensitivity analysis and 2007-12 Five-Year Leasing Program; and a commitment by the new administration to bring science back to decision-making. President Obama and his administration must establish a path forward that harmonizes this situation and provides the basic information required to protect the resources of the Arctic, including the subsistence way of life. The most efficient way to accomplish these goals is through another OCSEAP-type program limited to the Beaufort and Chukchi seas

To provide the basic information required to protect the resources of the Arctic, including the subsistence way of life, and to guide decisions about oil and gas and other industrial activities, a new comprehensive research and monitoring program should:

1. integrate existing information to give a more holistic picture of what is known and conduct an analysis of the gaps in information to determine the most pressing research and monitoring needs;
2. gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations;
3. track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways;
4. secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem structure and functioning, and effects of anthropogenic perturbations;
5. study potential ecological and sociological impacts; and
6. integrate these scientific data to identify Important Ecological Areas as well as processes and habitats that are sensitive and vulnerable to perturbation, and furnish a basis for marine spatial planning.

This program could easily be conducted in three simple phases over the next 5-7 years: 1) gap analysis and planning (2011-2012); 2) research and monitoring (2013-2016, with monitoring continuing into the future); and 3) integrating new and older information to provide decision-makers the basic understanding needed to make effective decisions (2016-2017). Each of these phases must be informed by local and traditional knowledge, including planning and peer-review.

Phase I: Gap Analysis and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information and gaps in knowledge. Based on that information, a research program can be devised, with public input, to fill the gaps.

Since the conclusion of the OCSEAP program, DOI's studies in the Arctic Ocean have not been guided by an overarching monitoring and research plan. Instead, research priorities over the past several decades have been guided by an assumption that enough was known about the basics. DOI, therefore, focused "on topical studies in smaller areas to answer specific questions and fill identified information needs."¹³ These applied research questions are important and have led to a better understanding of specific issues, such as the fall bowhead whale migration route through the Chukchi Sea. However, without continued monitoring of key parameters studied in OCSEAP it is now unclear if the base of information gained remains valid. Climate change has altered the region dramatically over the last 30 years and ecosystems have significant variability on yearly to decadal spans.

Thus, DOI stopped examining and monitoring the fundamentals and, instead focused on applied research without even tying those studies together in a framework or committing to update results. As a result, population and distribution data for several vulnerable species that play important roles in the marine ecosystem are either outdated or missing. For example, Arctic cod, which is potentially the most important fish species in this ecosystem, is indicated to be present throughout all of the U.S. EEZ, but no seasonal variation, concentration, or spawning area data are published at this time.¹⁴

The lack of comprehensive planning may account, at least in part, for conflicting statements made by DOI—first through the Bureau of Land Management then Minerals Management Service and now Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)—about the state of science in the Arctic. On the one hand, DOI has acknowledged repeatedly both that it lacks basic scientific information and needs good information for decision making.¹⁵ On the other hand, the agency points to the fact that it has spent \$350 million on research since 1973 across Alaska's 15 OCS leasing areas and, therefore, has a substantial understanding of the Arctic Ocean.¹⁶ The agency also has argued in court that the research undertaken gives it a sufficient basis for making decisions.¹⁷ The references in the Lease Sale 193 EIS discussed above about the lack of basic information for species runs directly counter to any assertions by DOI or BOEMRE that there is a broad base of information available for the Arctic from which to make decisions.

The National Science Foundation (NSF) also has funded important basic research in the Arctic Ocean. That research has been hypothesis-driven, meaning that it was designed to answer specific, cutting-edge scientific questions, including those about the specific impacts and feedbacks of climate change. While this cutting-edge research is important, it does not provide the basic, baseline information that is critical for making decisions, including what species live there, how many of them are there, and do those populations change from place to place and season to season. Much of that information simply is not available for the Arctic Ocean.

Similarly, industry has invested in significant scientific research, some of which may address important missing information. Currently, however, the results of those studies are not reliable because the data from industry studies are generally not made available publicly, and the degree to which other information about industry research is shared varies from study to study. Given the lack of transparency and the obvious conflict of interest for industry that would not want to share information that could potentially hinder development, there is a substantial risk of bias in the information that is shared. Unless

¹³ See Alaska Annual Studies Plan Final FY 2011 3 (October 2010), available at <http://alaska.boemre.gov/ess/esssp2011.pdf>.

¹⁴ See Arctic FMP EA at 79, 99, and 201; B. Blumh & R. Gradinger, *Regional variability in food availability for Arctic marine mammals*, 18 *Ecological Applications* S77-S96 (2008).

¹⁵ See <http://www.doi.gov/whatwedo/energy/ocs/AlaskaRegion.cfm> (stating that the Arctic Ocean requires "additional scientific, environmental, and spill risk analysis before new areas are offered for leasing."); see also Attachment 2 to this document detailing unknowns in Lease Sale 193 EIS.

¹⁶ See Alaska Annual Studies Plan Final FY 2011 at 1.

¹⁷ See *Native Village of Point Hope, et al. v. Salazar, et al.*, 1:08-cv-00004 (RRB), Fed. Dep. Off. n Br. at 12-17.

New research and monitoring should build on what has been learned about the Arctic Ocean already. Thus, the first step in this process is to reconcile the large information gaps with the important research that has occurred. Existing information should be compiled and integrated, then an analysis conducted of the gaps that are left. This gap analysis would then drive creation of an integrated research and monitoring program. The USGS Arctic studies initiative is an important step in this direction, and should be followed by a more comprehensive analysis as called for in Senator Begich's Arctic Ocean Research and Science Policy Review Act of 2009.¹⁸

President Obama and Secretary Salazar have directed the USGS to assess "resources, risks, and environmental sensitivities in Arctic areas."¹⁹ The USGS will complete an initial review of Arctic science and issue a report in April 2011 that will "examine the effects of exploration activities on marine mammals; determine what research is needed for an effective and reliable oil spill response in ice-covered regions; evaluate what is known about the cumulative effects of energy extraction on ecosystems and other resources of interest; and review how future changes in climate conditions may either mitigate or compound the impacts from Arctic energy development."²⁰ That report should set the stage for a more comprehensive analysis that forms the basis for implementation of the necessary studies and monitoring.

The USGS study is an important initial effort to gather existing information and identify gaps in knowledge, but it is likely not to be sufficiently comprehensive and inclusive to form the basis of the necessary research and monitoring program. Thus far, DOI has insisted on keeping the study firmly and fully in the control of the USGS and BOEMRE. Despite the important knowledge and experience within those agencies, their expertise clearly does not encompass the broad interdisciplinary breadth inherent in the more comprehensive undertaking needed. Experts are needed from many fields, from climate and oceanographic sciences to population biology and community ecology as well as the social sciences to determine the breadth of potential impacts to local communities. Second, the guidance given by DOI to USGS mandates consideration of four particular subject areas, which focuses their study towards a narrower applied research path rather than the holistic picture of Arctic information needs. Lastly, a gap analysis and research and monitoring plan should be developed with opportunities for public input and a peer review process that helps ensure the study accurately describes the state of, and existing gaps in, Arctic information.

Based on a comprehensive gap analysis, government scientists, together with public input, should define a research and monitoring plan to fill information gaps. In the aftermath of the *Exxon Valdez* oil spill a similar analysis and development of a research plan was put together with the benefit of hindsight to address the shortcomings of knowledge in Prince William Sound and the Gulf of Alaska that became apparent after the spill. The Gulf of Alaska Ecosystem Monitoring and Research (GEM) plan was designed to provide critical information for both quantitatively predicting the potential impacts of another spill and determining the impacts from another spill. The GEM plan should serve as a modern model for the type of plan needed to guide research and monitoring in the Arctic. The research and monitoring plan put together for the U.S. Arctic Ocean should be developed with input from the public and evaluated by an independent panel of experts.²¹

Phase II: Research and Monitoring

Once the information gaps are identified and a research plan devised, the research and monitoring must be executed. As the known gaps in knowledge outlined above show, scientific research and monitoring should include:

¹⁸ S. 1562, 111th Cong. (2010).

¹⁹ See Secretary Salazar Unveils Arctic Studies Initiative that will Inform Oil and Gas Decisions for Beaufort and Chukchi Seas, available at http://www.doi.gov/news/pressreleases/2010_04_13_releaseA.cfm.

²⁰ *Id.*

²¹ An outline for such a plan for the Arctic Ocean is included as Attachment 1.

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1. Marine life assessment to provide a year-round picture of the species in each marine habitat and their population trends;
2. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biological factors, such as productivity and community richness and diversity;
3. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses;
4. Studies designed to identify patterns of subsistence use and changes in well-being as well as potential impacts from industrial activities; and
5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate sciences to social impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to better elucidate the processes that underlie the way in which the ecosystem functions.²² As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCSEAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities.²³ They were only able to do this by studying multiple aspects of the ecosystem simultaneously, including climate indices, sea ice concentration, water temperature, sedimentation, and seafloor biomass. In addition to providing better information, this type of integrated research and monitoring is more cost effective because more information is elucidated than would be from individual studies.

ConocoPhillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing.²⁴ Their work indicates that the Chukchi Sea is not a homogenous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web in invertebrates, fish, birds and marine mammals.

This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic Ocean. ConocoPhillips's and Shell's research, however, is confined to areas around two of their drilling prospects during the open water season. With a concerted effort, this research could easily be expanded to the rest of the region and other seasons. Expanding this type of research and monitoring would provide decision-makers with the more complete picture needed to protect Arctic ecosystems and the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

²² Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact.

²³ J.M. Grebmeier, et al., *A major ecosystem shift in the northern Bering Sea*. 311 Science 1461-1464 (2006).

²⁴ See <http://doc.nprb.org/web/symposium/2010/2010%20AMSS%20Abstract%20Book.pdf> at 19-28.

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Phase III: Data Integration

Once sufficient information is available from the research and monitoring outlined above, that information should be synthesized to demonstrate an understanding of ecosystem structure and functioning, including quantitative and robust models of the food web, and a determination of the important ecological areas of the region. Those models and information provide the basis from which to understand likely impacts of industrial activities and, accordingly, whether and how to allow them. Managers will be able to move from qualitative assertions (i.e., educated guesses) to making quantitative assessments of potential impacts and allow decision makers to weigh the costs and benefits of industrial activities and to find alternatives that could allow for development while protecting the ecosystem and subsistence way of life.

This new program would provide the answers to the unknowns identified in the Lease Sale 193 litigation by virtue of providing a basic understanding of the marine ecosystem. The missing information is broad in scope and covers major, fundamental components of the ecosystem. A comprehensive research and monitoring program, rather than ad hoc research will build this foundation of knowledge most efficiently.

In addition, having this basic information will avoid the problem that has arisen in the Gulf of Mexico, where development occurred with scant attention to the status of the ecosystem beforehand. As a result, we find ourselves wondering what was lost following development or an industrial accident because we did not evaluate what was there to begin with. Further, comprehensive, integrated research and monitoring could prevent that from happening in the Arctic, and a complete understanding of the ecosystem can drive response and restoration activities should an industrial accident occur.

Meeting Legal Requirements and Policy Goals

As explained above, an integrated, comprehensive research and monitoring program would be the most efficient way to provide the baseline necessary to make informed decisions about offshore oil and gas activities in the Arctic. Such a plan would build on the commitments to science already made by the administration and would be the most effective way to resolve the ongoing litigation and controversy.

Federal courts have invalidated the 2007-12 Five-Year Leasing Program and Environmental Impact Statement (EIS) for Lease Sale 193 in the Chukchi Sea. While the decisions rest on different grounds, the lack of scientific information about the Arctic Ocean. In the 2007-12 Five-Year Leasing Program that lack of scientific information resulted in an arbitrary analysis of the relative environmental sensitivity of marine areas. In the Lease Sale 193 context, the court found that the agency had not complied with a Council on Environmental Quality regulation, 40 C.F.R. § 1502.22, by failing to determine "whether missing information identified by the agency was relevant or essential" and then failing to determine "whether the cost of obtaining the missing information was exorbitant or the means of doing so unknown."

DOI has issued a draft proposed 2007-12 Five-Year Leasing Program and a Draft Supplemental EIS for Lease Sale 193. Neither document fully accounts for the missing information or makes an effort to put in place the necessary interdisciplinary, integrated research and monitoring. Both, however, are drafts, and DOI still has the opportunity to move forward in this way.

As explained above, there are 38 pages of references to scientific unknowns made by DOI and NOAA in planning for Lease Sale 193. The agency has an affirmative duty to get this information, including by performing research itself when necessary, if it is essential to its decision and not exorbitant in cost. Information is significant, essential, or important where without the information the agency cannot accurately assess the effects of various alternatives, the extent of certain problems, or the need for particular proposed actions.

Basic scientific information is essential at the lease sale stage. It is when BOEMRE evaluates alternatives about the size of the sale, deferral areas, and other limitations that may affect exploration and

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development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. Information that would be gathered by a comprehensive research and monitoring effort would allow for more effective consideration of alternatives and better evaluation of potential impacts.

Additionally, at the lease sale stage, BOEMRE should undertake a more detailed analysis than was conducted for the Five-Year Leasing Program, based on better information. This analysis is particularly important given the agency's current practice of preparing an environmental assessment, rather than full EIS to evaluate proposed exploration activities. If the agency prepares a programmatic-level analysis based on incomplete information at both the Leasing Program and Lease Sale stages, no detailed evaluation will be prepared until development is scheduled to occur. Neither OCSLA nor NEPA contemplate such a result.

Nor, as it appears to have done in the Draft SEIS for Lease Sale 193 should BOEMRE rely on analyses to be conducted by other agencies pursuant to other statutory mandates. Rather, the agency should abide Secretary Salazar's commitment to science and lead the way toward a better understanding of the ocean ecosystem by working with other expert agencies to put in place a comprehensive research and monitoring program.

The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately \$100 million over 5 years. By comparison, Lease Sale 193 alone generated \$2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefit, but it also poses considerable risks, economic and otherwise, to the benefits provided by a healthy marine ecosystem.

These cost estimates are consistent with the other programs mentioned above. The GEM program was projected to cost \$120 million in 1999, and the OCSEAP program was estimated to cost \$25 million annually.

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in such an approach is to develop and implement a comprehensive research and monitoring program like OCSEAP. We simply do not know enough now to make good decisions about stewardship for the oceans and clean energy. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate; and if so, when, where and how such activities could be conducted.

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Attachments

Number	Title
1	A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean (October 2010 Draft).
2	Compendium of Lease Sale 193 Unknowns – Exhibit 129 to Plaintiffs' Motion for Summary Judgment in <i>Native Village of Point Hope, et al. v. Salazar, et al.</i> , 1:08-cv-00004 (RRB) (Feb. 2009).
3	Major Problems With Oil Spill Models (October 2010 Draft).

Attachment 1
A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean

Compared with other marine ecosystems, very little is known about the living marine resources in the U.S. Arctic Ocean. We recognize that the recent losses of sea ice during summer are fundamentally changing the ways these ecosystems function, but we still know little about how these food webs work. Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. Permitting large-scale industrial activities in the absence of even basic knowledge of the composition and functioning of the marine ecosystem sets the stage for inadvertent environmental degradation at best, and catastrophic interactions at worst. The risks of adverse interactions are exacerbated by the rapid rate of environmental change in the Arctic, and our limited knowledge of existing resources and conditions makes it difficult even to detect ecosystem responses to change. The following science plan is intended as a guide toward systematically improving our knowledge of Arctic marine ecosystem structure and function.

The geographic scope of this science plan includes the exclusive economic zone (EEZ) of the U.S. Arctic Ocean, extending from the northern Alaskan coastline to the continental shelf break to the north, from the Bering Strait in the west to the Canadian border to the east. Most of the plan should be completed within four years. In recognition of the great scientific value of long-term data sets, however, the monitoring should be continued indefinitely, with at least a multi-decade planning horizon.

The essential elements of the plan are grouped into six categories: gap analysis, resource assessment, environmental monitoring, scientific process studies and synthesis. These elements are intended to (1) define existing information and research needs; (2) gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations, (3) track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways; (4) secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem functioning, and effects of anthropogenic perturbations; (5) study sociological impacts, and (6) integrate these scientific data to identify processes and habitats that are sensitive and vulnerable to perturbation and furnish a basis for marine spatial planning. Each of these constituent efforts must be informed by local and traditional knowledge (LTK) at all stages, including planning and peer-review.

I. Gap Analysis

- A. Conduct a comprehensive gap analysis to determine what scientific research is currently being done and what additional information is needed.

II. Marine Life Assessment

- A. Conduct a comprehensive survey of species occupying each marine habitat, including communities in the benthic, pelagic and littoral zones, and ice-associated communities. Whenever feasible these surveys should be conducted seasonally to identify migrations and patterns of periodic habitat use.

- B. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals and some fish). These assessments will provide crucial baselines for evaluating impacts of industrial development and ecosystem change.

III. Environmental Monitoring

- A. Establish a network of fixed monitoring stations to track physical forcings and local biological responses. This station network should be patterned along the lines of the National Science Foundation's Long Term Ecological Research Network (LTER) and NOAA's oceanographic buoys adapted to the US Arctic Ocean, with sampling stations allocated to both the Chukchi and Beaufort seas. These stations will measure physical factors in the ocean including temperature and salinity, acidity, alkalinity and nutrients as functions of seawater depth, along with current profilers at strategically chosen locations; atmospheric factors including surface temperature, wind speed and direction, insolation, gas composition, and particulate density and composition; and biological factors such as primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.
- B. Support remote monitoring by satellite and aircraft to track sea ice extent, surface albedo and ocean color in collaboration with NOAA, NASA and NSIDC.
- C. Establish a systematic process for incorporating LTK for early detection of unanticipated ecosystem change, and for review by LTK experts for accuracy and completeness.
- D. Periodically update the resource assessments identified in "II" above to track ecosystem responses to climate change and industrialization.
- E. Monitor detection of invasive species, including species displaced by warming seawater temperatures to the south, and exotic species introduced by industrial activities.

IV. Scientific Process Studies

- A. Identify processes strongly coupled with biological production, species' distribution and abundance, and support research that will improve understanding of them aimed at improving prediction of community responses to short- and long-term environmental stressors. This research should include identification of the species interactions that structure the biological community, which includes studies of the food web to determine linkages and energy flow through the ecosystem, as well investigations to determine the processes responsible for nutrient cycling.
- B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, including processes strongly affected by transition from light limitation to nutrient limitation resulting from continued sea ice loss, effects of warmer water temperatures on growth and provisioning requirements of selected target species (especially young-of-the-year and juveniles), and sensitivity to acidification from increases in atmospheric carbon dioxide.

V. Sociological and Ecosystem Impact Studies

- A. Identify historical and current patterns of land and subsistence use, and conduct a survey of social and psychological well-being in North Slope communities to document current conditions in these communities.
- B. Monitor changes in patterns of land and subsistence use, and in measures of social and psychological well-being in North Slope communities affected by oil development.
- C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, such as research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

VI. Data Integration and Marine Spatial Planning

- A. Construct ecosystem models including a quantitative nutrient-phytoplankton-zooplankton (NPZ) model and an Ecopath model to evaluate how predicted ecosystem responses compare with data observed from the monitoring programs. Identified inadequacies will highlight areas requiring further research.
- B. Archive monitoring data in a publicly accessible database that is continuously maintained. Also, monitoring results should be periodically included in GIS maps to facilitate identification of Important Ecological Areas (IEAs) and important subsistence areas in the US Arctic Ocean and how they may change through time. Important Ecological Areas are geographically delineated areas with distinguishing characteristics that contribute disproportionately to an ecosystem's health or are particularly vulnerable to disturbance.
- C. Integrate the results of the monitoring and research described above with a marine spatial planning effort that identifies IEAs as well as all potential energy sources and their availability to markets to help minimize the likelihood of adverse consequences associated with industrialization.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA

_____)
NATIVE VILLAGE OF POINT HOPE, et al.,)
)
Plaintiffs,)
)
v.) Case No. 1:08-cv-00004-RRB
)
DIRK KEMPTHORNE, Secretary of the Interior, et al.,)
)
Defendants,)
)
and)
)
SHELL GULF OF MEXICO, INC., and)
CONOCOPHILLIPS COMPANY,)
)
Intervenor-Defendants.)
_____)

DECLARATION OF COUNSEL

I, Erik Grafe, hereby declare:

- 1. I am one of the attorneys representing Plaintiffs Native Village of Point Hope, et al., in this action. I submit this declaration in support of Plaintiffs' opening brief.
- 2. Attached to this declaration as Attachment A is a compendium of statements made by the Minerals Management Service (MMS) in its Final Environmental Impact Statement

(EIS) for the Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) (May 2007). This contains statements in the EIS acknowledging missing information about the Chukchi Sea environment and the potential effects of the lease sale 193 on wildlife and subsistence. This declaration was compiled by an Earthjustice staff member under my direct supervision and reviewed by me.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 29th day of January, 2009.

s/ Erik Grafe
ERIK GRAFE

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ATTACHMENT A

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LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

“Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that ice cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level.” EIS at III-32.

“Despite these previous works, several data deficiencies remain. Information of current distribution and abundance (e.g., fish per square kilometer) estimates, age structure, population trends, or habitat use areas are not available for fish populations in the northeastern Chukchi Sea. Many fish studies reporting distribution and/or abundance are 20-30 years old. Other studies are still older. For example, the only survey of demersal fishes in the region is more than 20 years old. Fish assemblages and populations in other marine ecosystems of Alaska (e.g., Gulf of Alaska, Bering Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years; it is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action.” EIS at III-32.

“Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-33.

“Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and area reflect a pattern of temporally and spatially irregular and disjunct sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is unknown if the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Bering seas are considered

to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northwestern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are very limited; most of the surveys/studies have been performed in coastal waters landward of the landward of 200-m isobath, with scant surveys having sampled deeper waters. . . . [R]obust population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare).... Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities; growth, reproduction, or survival rates within regional or local habitats; or productivity rates by habitat, essentially are unknown for fishes inhabiting waters seaward of the nearshore, brackish-water ecotone.” EIS at III-34 (internal citations omitted).

2. Neritic-Demersal Assemblage

“Life-history data for many of the demersal species using neritic substrates is lacking (e.g., whitespotted greenling, twohorn sculpin, spinyhook sculpin, veteran poacher); consequently, assessing the species resilience to perturbations is not feasible until additional information becomes available.” EIS at III-35.

3. Neritic-Pelagic Assemblage

“No species of this assemblage are assessed as being of low resilience, because life-history data are lacking.” EIS at III-35.

4. The Cryopelagic Assemblage

“Arctic cod and Pacific sand lance are assumed to be of medium resilience to exploitation; polar cod and toothed cod are data deficient such that an assessment of resilience is not feasible with available information.” EIS at III-36.

5. Oceanic-Demersal Assemblage

“Life-history statistics for most species covered in this assemblage are data deficient, chiefly for lack of fish surveys and studies in oceanic waters of the Alaskan arctic.” EIS III-36.

6. Diadromous Fishes

“A number of diadromous species in the region have complicated life-history patterns that are not fully understood.” EIS at IV-61.

7. Salmon

“Little is known of the movements undertaken during the 18 months the [pink] salmon spend at sea.” EIS at III-39 (quoting Schmidt, McMillan, and Gallaway (1983)).

“Chum salmon fry, like pink salmon, do not overwinter in streams but migrate (mostly at night) out of streams directly to sea shortly after emergence. The timing of outmigration in the arctic is unknown, but occurs between February and June (chiefly during April and May) in more southern waters.” EIS at III-40.

II. MARINE MAMMALS

A. Whales

1. Bowhead Whale

"There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean." EIS at III-45.

"Recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are lacking." EIS at III-45.

"No data are available indicating that, other than historic commercial whaling, any previous human activity has had a significant adverse impact on the current status of BCB Seas bowheads or their recovery." EIS at III-45.

"Conservation concerns include: . . . uncertain potential impacts of climate warming. . ." EIS at III-45.

"The uncertainty of the stock structure adds some uncertainty to summaries of the status of bowheads that may be impacted by the Proposed Action." EIS at III-45.

"[I]f whales become more 'skittish' and more highly sensitized following a hunt, it may be that their subsequent reactions, over the short-term, to other forms of noise and disturbance are heightened by such activity. Data are not available that permit evaluation of this possible, speculative interaction." EIS at III-46 (quoting NMFS' Arctic Region Biological Opinion).

"There is little information regarding causes of natural mortality for BCB Seas bowhead whales." EIS at III-49.

"Little is known about the effects of microbial or viral agents on natural mortality [of bowheads]." EIS at III-49.

"The amount of feeding [by the BCB Seas bowhead stock] in the Bering Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002)." EIS at III-49.

"The MMS funded large-scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by Mel'nikov, Zelensky, and Ainana (1997), Moore (1992), Moore and Clarke (1990), and Moore, DeMaster, and Dayton (2000). We have plotted counts of bowheads in the Chukchi Sea during those surveys (Fig. III.B-4), because they visually provide limited insight into areas where bowheads may be exposed to oil and gas activities should they occur in the Chukchi Sea Planning Area.

However, we caution against over-interpretation of these data out of context of survey effort and, because these data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales; they are the best data available." EIS at III-50—51.

"Data are limited on the bowhead fall migration through the Chukchi Sea before the whales move south into the Bering Sea." EIS at III-51.

"The amount of feeding in the Chukchi Sea and Bering Strait in the fall is unknown as is the amount of feeding in the Bering Sea in the winter (Richardson and Thomson, 2002). Richardson and Thomson (2002:xxxviii) concluded that: "...behavioral, aerial-survey, and stomach-content data, as well as certain energetics data...show that bowheads also feed widely across the eastern and central Beaufort Sea in summer and fall." In mid- to late fall, at least some bowheads feed in the southwest Chukchi. Detailed feeding studies have not been conducted in the Bering Sea in the winter." EIS at III-54.

"There are locations in the Beaufort Sea and the western Chukchi Sea where large numbers of bowheads have been observed feeding in many years. However, the significance of feeding in particular areas to the overall food requirements of the population or segments of the population is not clear." EIS at III-55.

"Recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available." EIS at III-55.

"[I]mportantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales." EIS at IV-82.

"Bowheads are not randomly distributed throughout the Proposed Action area. The extent of use of particular habitats varies among years, sometimes considerably; therefore, it is difficult to predict, in advance of a given year, exactly how bowheads will use the entire area that is available to them. Some aspects of their habitat use are poorly understood. For example, current data are not available on which to typify the current summer use of the northern Chukchi Sea by bowheads. For example, in the Beaufort Sea in some years, large aggregations of bowheads near Smith Bay have been observed during MMS' Bowhead Whale Aerial Survey Program (BWASP) surveys at the beginning of September. It is unclear if these animals are early migrants that have come from the east, if they summered in the northern portions of the Beaufort Sea and came south, or if they entered from the Chukchi Sea and never migrated east. . . . It is important to note that the Chukchi Sea data are not recent (1979-1991) and thus should not be interpreted as indicating current patterns of bowhead use of the Chukchi Sea." EIS at IV-101.

"We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined." EIS IV-102 (similarly at EIS at IV-105).

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

2. Fin Whale

"The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock." EIS at III-46. *See also id.* at III-56 (similar).

"There are no recent data to confirm their use or lack of use of the Chukchi Sea Planning Area, or adjacent areas to the south." EIS at III-47.

"There is little information about natural causes of mortality (Perry, DeMaster, and Silber, 1999a). The NMFS summarized that 'There are no known habitat issues that are of particular concern for this stock' (Angliss and Lodge, 2002, 2005). Perry, DeMaster, and Silber (1999a:51) listed the possible influences of disease or predation as 'Unknown.'" EIS at III-56.

"The importance of specific feeding areas to populations or subpopulations of fin whales in the North Pacific is not understood." EIS at III-57.

"The possible influences of disease or predation and of overutilization [on fin whales] are listed [by NMFS] as 'Unknown.'" EIS at V-28.

3. Humpback Whale

"Available information does not indicate humpback whales inhabit the Chukchi Sea OCS project area. There are no recent data to confirm their lack of use of the Chukchi Sea OCS Planning Area, or adjacent areas to the south." EIS at III-47.

"There is 'no clear consensus' (Calambokidis et al., 1997:6) about the population stock structure of humpback whales in the North Pacific due to insufficient information (Angliss and Lodge, 2002) (see further discussion in USDOJ, MMS,2003a,b)." EIS at III-58.

"Angliss and Outlaw (2005) stated that: 'There are no reliable estimates for the abundance of humpback whales at feeding areas for this stock' (the Western North Pacific Stock) 'because surveys of the known feeding areas are incomplete, and because not all feeding areas are known.' There are not conclusive or reliable data on current population trends for the western North Pacific stock (Perry, DeMaster, and Silber, 1999b; Angliss and Outlaw, 2005)." EIS at III-59.

"Causes of natural mortality in humpbacks in the North Pacific are relatively unknown, and rates have not been estimated." EIS at III-60.

"The threat of disease or predation [on humpbacks] as [sic] unknown." EIS at V-29.

4. Gray Whale

"[E]xisting information is insufficient to understand the dynamics of gray whales and offshore Chukchi Sea habitat relationships, quality and quantity dynamics and distribution of prey resources, or the capability of habitat to support (carrying capacity) long- and short-term whale use." EIS, Vol. II, AC 019-076.

"[T]he relationship between the expanding gray whale population to amphipod community dynamics is unknown but is of considerable interest." EIS at V-35.

5. Beluga Whale

"Understanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures. Late-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at IV-163. *See also id.* at III-77 (second sentence same).

"Based on recent telemetry studies on eastern Chukchi belugas, it is likely that members from both stocks occur in similar places and at similar times during the fall migration although the significance of this is unknown (Suydam, Lowry, and Frost, 2005)." EIS at III-76.

"Winter food habits of belugas are largely unknown . . ." EIS at III-77.

"Belugas generally are associated with ice and relatively deep water throughout the summer and autumn, which may reflect their preference for feeding on ice-associated arctic cod (Moore et al., 2000). Late-summer distribution and fall-migration patterns are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at III-77.

6. Harbor Porpoise

"The harbor porpoise inhabits shallow, coastal areas in temperate, subarctic, and arctic waters of the Northern Hemisphere (Read, 1999). In the North Pacific, harbor porpoises range from Point Barrow, Alaska to Point Conception, California (Gaskin, 1984). In Alaska, three separate stocks have been recommended, although there is insufficient biological data to support the designation at this time." EIS at III-78.

7. Minke Whale

"There are no reliable estimates for the Alaska stock of minke whales. A provisional estimate was made for the Bering Sea of 810 individuals; however, this is not used for the Alaska stock because the entire stock's range was not surveyed." EIS at III-78.

B. Other Marine Mammals

1. Seals

"Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Bering/Chukchi Sea species known to be in decline. Accurate population estimates for ice seals are not available and are not easily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec. III.A.4, Sea Ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec. III.A.3, Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006)." EIS at III-71.

a. Ringed Seal

"No reliable estimate for the size of the Alaska ringed seal stock is available (Angliss and Outlaw, 2005) . . ." EIS at III-71.

b. Spotted Seal

"No reliable estimate for the size of the Alaska spotted seal stock is available (Angliss and Outlaw, 2005)." EIS at III-72.

c. Ribbon Seal

"Ribbon seals inhabit the North Pacific Ocean and the adjacent fringes of the Arctic Ocean. In Alaska, they range northward from Bristol Bay in the Bering Sea and into the Chukchi and western Beaufort seas. They are found in the open sea, on pack ice, and rarely on shorefast ice (Kelly, 1988). As the ice recedes in May to mid-July, they move farther north in the Bering Sea, hauling out on the receding ice edge and remnant ice (Burns, Shapiro, and Fay, 1981). Seal distribution throughout the rest of the year is largely unknown; however, recent information suggests that many ribbon seals migrate into the Chukchi Sea for the summer months (Kelly, 1988)." EIS at III-73.

"No reliable estimate for the size of the Alaska ribbon seal stock is available (Angliss and Outlaw, 2005)." EIS at III-73.

d. Bearded Seal

"No reliable estimate for the size of the Alaska bearded seal stock currently is available (Angliss and Outlaw, 2005). Bengtson et al. (2005) conducted surveys in the eastern Chukchi Sea but could not estimate abundance from their data." EIS at III-74.

2. Pacific Walrus

"No reliable estimate is currently available for the size of the Alaskan stock of Pacific walrus (Angliss and Outlaw, 2005). However, available evidence indicates that the population is likely in decline (Kelly, Quakenbush, and Taras, 1999; Kochnev, 2004)." EIS at III-74. See also *id.* at EIS at III-76 (first sentence same).

"The population size has never been known with certainty; however, the most recent survey estimate was approximately 201,039 animals (Gilbert et al., 1992)." EIS at III-76.

3. Polar Bear

"A reliable estimate for the CBS stock of polar bears, which ranges into the southern Beaufort Sea, does not exist, and its current status is in question. In 2002, the IUCN/SSG Polar Bear Specialist Group estimated the size of the CBS population at 2000+ bears, though the certainty of this estimate was considered poor (Lunn, Schliebe, and Born, 2002)." EIS at III-84.

"Coastal areas provide important denning habitat for polar bears. Terrestrial denning areas for bears of the CBS polar bear stock are less well understood than those for the SBS polar bear stock." EIS at IV-166.

"The maximum reproductive age for polar bears is unknown, but is likely well into their 20's (Amstrup, 2003)." EIS at III-81.

"[W]ith the collapse of the Soviet empire in 1991, levels of illegal harvest dramatically increased in Chukotka in the Russian Far East (Amstrup, 2000; USDO, FWS, 2003). While the magnitude of the Russian harvest from the CBS is not precisely known, some estimates place it as high as 400 bears per year, although the figure is more likely between 100 and 250 bears per year." EIS at III-84. See also *id.* at V-36 (same).

"[B]ecause of the unknown rate of illegal take currently taking place, in 2006 the IUCN/SSG Polar Bear Specialist Group designated the status of the CBS stock as "declining" from its previous estimate of 2000+ animals (IUCN/SSG Polar Bear Specialist Group, 2006)." EIS at III-84.

III. MARINE AND COASTAL BIRDS

1. General

"Despite the importance [for marine and coastal birds] of [Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson], as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

2. Threatened Spectacled Eiders¹

"In general, population demography for this species and in particular breeding information (i.e., timing of pair formation and duration of pair bonds, timing of mating, male and female dispersal rates, sex-specific estimates for natal, breeding, and molt-site fidelity, breeding propensity, nonbreeding component, duckling/brood and first-year survival, etc.) is poorly understood due to a lack of long-term marking/monitoring programs and/or low resighting/recapture/recovery rates." BE at 23.

"Few data are available on the overall longevity of spectacled eiders, but if similar to other eiders, they would likely be long-lived." BE at 23.

"Recruitment rate of spectacled eiders is unknown (USFWS 1999)." BE at 25.

"Migration routes [of spectacled eiders] in the spring are not well known . . ." BE at 25.

"The summer range of non-breeding [spectacled] eiders is not known . . ." BE at 26.

"Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

"The world population of spectacled eiders has declined substantially during the past 30 years, and may be continuing to decline (USFWS 1999, 2002b). Long-lived species like spectacled eiders typically do not have highly variable populations and unknown mortality factors may be undermining their ability to maintain a stable population. The causes of decline could be varied and are largely unknown . . ." BE at 28.

¹ From Minerals Management Service, Biological Evaluation of Spectacled Eider (*Somateria fischeri*), Steller's Eider (*Polysticta stelleri*), and Kittlitz's Murrelet (*Brachyramphus brevirostris*) for Chukchi Sea Lease Sale 193 (September 2006), incorporated by reference into the Lease Sale 193 EIS at III-61, IV-125, V-30.

"Variability in the abundance of the Alaska breeding population of spectacled eiders is not well understood (USFWS 1999)." BE at 28.

"The Alaskan and Russian populations of spectacled eider were listed as a threatened species on 9 June 1993 (USFWS 1993). Although the factors that caused these declines are unknown, a number of potential contributory factors have been identified. These, or other still-identified threats, have increased mortality above the rate of reproductive replacements. No data are available to show whether similar trends have affected the breeding population in Russia where as many as 40,000 pairs traditionally nested." BE at 29.

3. Threatened Steller's Eiders²

"[T]he length of time that Steller's eiders remain paired is unknown." BE at 13.

"Many life history aspects of Steller's eiders (e.g., timing of pair formation, duration of pair bonds, dispersal rates, sex-specific seasonal site fidelity, first-year survival, etc.) are poorly understood." BE at 13.

"The reason for relatively low nesting success or failure to nest by the Alaska nesting population is unknown, but may be related to predators switching to alternate prey when lemmings are in low abundance (Quakenbush and Suydam 1999)." BE at 15.

"Steller's eider recruitment rates are unknown (USFWS 2002b)." BE at 15.

"Departure from the [Arctic Coastal Plain] to molting areas is poorly documented, but males probably begin departing as early as late June, followed by non- and failed nesting females resumably from late July – late August, and finally successful females and fledged young." BE at 16.

"The population of Steller's eiders molting and wintering along the Alaska Peninsula appears to be declining (USFWS 1999, 2002a). . . . The causes of decline could be varied and are largely unknown, but if the cause of the decline is within the marine environment, it is reasonable to conclude that the Alaska and Russia nesting populations are being affected similarly because a large portion of the Russian population winters with the Alaskan population." BE at 18.

"Variability in the abundance of the Alaskan breeding population of Steller's eiders is not well understood." BE at 18.

"Williamson et al. (1966) listed Steller's eiders as occurring in the Cape Thompson area 25 miles southeast Point Hope during surveys for Project Chariot at Ogotoruk Creek. Steller's eiders were listed as occupying marine littoral, lacustrine, and beach environments in order of affinity. In this

² See note 1.

study, marine littoral waters extended seaward 2 miles from shore. Steller's eiders were listed as present from June 1 through October 4 and uncommon, but possibly breeding in the area. It is not known if Steller's eiders still nest in this area." BE at 20-21.

4. Kittlitz's Murrelets³

"The Kittlitz's murrelet (*Brachyramphus brevirostris*) is one of the rarest and least understood seabirds in North America. There is limited life history information on the Kittlitz's murrelet (i.e., age at first breeding, nest success, hatching success, fledging success, first-year survival, survival to breeding age, proportion of breeding females, proportion of non-breeders, periodic non-breeding, etc.) and mechanisms of population regulation. The limited information available for this species and research on the closely-related marbled murrelet suggests a K-selected life history strategy." BE at 33.

"The longevity of the Kittlitz's murrelet is unknown . . ." BE at 33.

"Age to maturity in Kittlitz's murrelets is unknown . . ." BE at 33.

"Little is known about the reproductive strategy of Kittlitz's murrelet because nesting sites are difficult to find (Day et al. 1999)." BE at 33.

"Annual breeding effort is poorly understood, but is considered highly variable." BE at 33.

"Spring migration for Kittlitz's murrelets in the Chukchi Sea is unknown . . ." BE at 34.

"Little is known about Kittlitz's murrelet recruitment . . ." BE at 34.

"Annual adult survival has not been estimated . . ." BE at 34.

"Though there is some evidence for long-term population declines for *Brachyramphus* murrelets (van Vliet and McAllister 1994, Ralph et al. 1995, Kuletz et al. 2003), Day et al. (1999) argued that evidence for major population declines for the Kittlitz's murrelet was equivocal. In large part, their conclusion stems from the fact that historical population estimates are lacking (but see Isleib and Kessel 1973, Agler et al. 1998, Kendall and Agler 1998)." BE at 34.

"Fall migration in the Chukchi Sea population [of Kittlitz's murrelet] is unknown . . ." BE at 35.

"Post-breeding distribution [of Kittlitz's murrelet] is poorly understood, but is likely farther offshore than pre-breeding season." BE at 35.

"Winter distribution [of Kittlitz's murrelet] is poorly understood, but is probably pelagic." BE at 35.

³ See note 1.

"The diet of the Chukchi Sea summer residents is unknown . . ." BE at 35.

"Winter foods are unknown, but may consist mostly of pelagic euphausiids or other macroinvertebrates." BE at 35.

"Information regarding fidelity to nesting sites is not available (Day et al. 1999)." BE at 35.

"Causes for the declines [in Kittlitz's murrelets] are not well known, but likely include: habitat loss or degradation, increased adult and juvenile mortality, and low recruitment, and we believe that glacial retreat and oceanic regime shifts are the factors that are most likely causing population-level declines in this species." BE at 36 (citing USFWS status review, 2004).

5. Cliff-Nesting Seabirds

a. Murres

Noting "limited data." EIS III-62.

b. Puffins

"The current status of horned puffins in the Chukchi Sea is unknown." EIS III-62.

"The current status of the tufted puffin in the Chukchi Sea is also unknown." EIS III-62.

c. Black-Legged Kittiwake

"The current status of the black-legged kittiwake (*Rissa tridactyla*) in the Chukchi Sea is unknown." EIS at III-63.

"The portion of [Chukchi] population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown." EIS at III-63. See also *id.* at IV-142 (similar).

"Current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown." EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

"The current status of the northern fulmar (*Fulmarus glacialis*) is unknown." EIS at III-63.

b. Short-Tailed Shearwater

"The current status of the short-tailed shearwater (*Puffinus tenuirostris*) in the Chukchi Sea is unknown." EIS at III-63.

c. Auklets

"The current status of parakeet (*Cyclorhynchus psittacula*), least (*Aethia pusilla*) and crested (*A. cristatella*) auklets in the Chukchi Sea is unknown." EIS at III-63.

7. High Arctic-Associated Seabirds

a. Black Guillemot

"The current status of the black guillemot (*Cepphus grylle*) in the Chukchi Sea is unknown." EIS at III-63.

b. Ivory Gull

"The current status of the ivory gull (*Pagophila eburnea*) in the Chukchi Sea is unknown. Divoky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea." EIS at III-64.

c. Arctic Tern

"The current status of the Arctic tern (*Sterna paradisaea*) in the Chukchi Sea is unknown." EIS at III-64.

8. Tundra-Breeding Migrants

a. Jaegers

"The current status of [all three species of] jaegers in the Chukchi Sea is unknown." EIS at III-64.

b. Glaucous Gull

"The current status of the glaucous gull (*Larus hyperboreus*) in the Chukchi Sea is unknown." EIS at III-64.

9. Waterfowl

a. Yellow-Billed Loons

"Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is very little known about the coastal areas bordering the Chukchi Sea." EIS at III-65.

"The [yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown." EIS at IV-140.

b. Common Eider

"During spring migration, the common eider (*Somateria mollissima*) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore." EIS at III-66.

c. Pacific Brant

"The current status of the Pacific brant along the Chukchi Sea is unknown." EIS at III-68.

d. Greater White-Fronted Geese

"The current status of greater white-fronted geese along the Chukchi Sea coast is unknown." EIS at III-68.

e. Lesser Snow Goose

"Ritchie et al. (2006) reported that the number of snow geese nesting on the Ikpikpuk River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kukpowruk River delta colony." EIS at III-68.

10. Shorebirds

a. Buff-Breasted Sandpiper (species of concern)

Noting "limited data." EIS III-70.

b. Bar-Tailed Godwit (species of concern)

"The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood." EIS at III-69.

"The North American population of bar-tailed godwits (*Limosa lapponica baueri*) breeds in western and northern Alaska. Postbreeding bar-tailed godwits move to staging grounds along the Bering Sea Coast and then apparently fly nonstop 11,000 km to New Zealand. Recent counts conducted at both breeding and nonbreeding sites provide evidence of a serious and rapid population decline (McCaffrey et al., 2006), but the cause of the decline is unknown." EIS at III-69.

LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

I. FISH

A. General

1. General effects of seismic on fish

"A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur." EIS at II-33. See also *id.* at IV-51—52 (similar) and IV-74 (similar).

2. General effects of oil spills on fish

"Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected." EIS at II-34. See also EIS at IV-52 and IV-74 (similar).

"While small-spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill-response. Overall, it is unclear whether, over the long-term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected." EIS at IV-72.

B. Effects on Marine Pelagic Species

"Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made." EIS at IV-61.

C. Effects on Capelin

"Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAH's) retained in the substrate, as PAH's in weathered oil can be biologically available for long periods and very toxic to sensitive lifestages, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of the capelin to detecting contaminated substrates and how long the oil persists in the localized habitat." EIS at IV-60-61.

"Also unknown are the distribution and abundance of spawning sites used by capelin in the Alaskan Arctic." EIS at IV-63.

D. Effects on Arctic Cod

"Although arctic cod can be extremely abundant in nearshore lagoonal areas, the importance of nearshore versus offshore environments to the lifecycle is not known (Craig et al., 1982). Although it is known that juvenile arctic cod associate with floating ice, it is unknown to what degree this association contributes to the development and survival of young fishes later recruiting to the breeding population. If early lifehistory stages of arctic cod were concentrated in nearshore environments, in patches in the open ocean, or under floating ice, they certainly would be more vulnerable to effects from an oil spill impacting such habitats." EIS at IV-62.

II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

"Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur." EIS at II-37.

"[B]ecause of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas [regarding Alt. III]. EIS at II-42. See also *id.* at IV-269 (same) and EIS at II-45 (same, re: Alt. IV).

"Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to predict with certainty what potential impacts from such development would have on threatened and endangered marine mammals." EIS at IV-111.

"Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations." EIS at IV-152.

"In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (IWC, 2006)." EIS at IV-162-63.

"[W]ithout historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals." EIS at IV-156.

"Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammal populations in the project area as a result of the Proposed Action." EIS at IV-145.

"Careful mitigation can help reduce the effects of future industrial developments and their accumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an

adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area. Increasing vessel traffic in the Northwest Passage, defined as the marine route between the Pacific and Atlantic oceans through the Arctic Ocean across the top of North America, which includes the Proposed Action area, increases the risks of oil and fuel spills and vessel strikes of marine mammals." EIS at IV-145-46.

"Because very little is known about the distributions, population sizes or habitat use of marine mammals in the Chukchi Sea, it is difficult to determine if significant impacts will or will not occur to marine mammals as a result of the proposed action." EIS at V-32.

2. Effects of Seismic and Other Noise on Marine Mammals

"Because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area." EIS at II-37. See also EIS IV-145-146 (similar).

"Despite the increasing concern and attention noted above, there still is uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially on the long-term, cumulative consequences of increasing noise in the world's oceans from multiple sources (NRC, 2003, 2005). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral "take equivalents". These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2005) are qualitatively incorporated in MMSs analysis." EIS at IV-86.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown . . ." EIS IV-89.

"Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS IV-147.

3. Effects of Oil Spills on Marine Mammals

"There are few post-spill studies with sufficient details to reach firm conclusions about the effects, especially the long-term effects, of an oil spill on free-ranging populations of marine mammals." EIS at IV-115.

B. Whales

1. General

"The need to rely on indirect methods of assessing the environmental impact of human activity on marine mammals is a recurring problem (Inglis and Gust, 2003). Impact assessments for cetaceans typically emphasize immediate behavioral responses to human activities (Samuels and Bejder, 2004), the biological relevance of which is rarely known (Corkeron, 2004)." EIS at IV-154.

"[M]onitoring plans typically emphasize readily obtainable, short-term behavioral measures that can be directly related to disturbance factors (Bejder et al., 2006). However, it is rarely known in what ways short-term responses translate to longer term changes in reproduction, survival, or population size (Gill, Norris, and Sutherland, 2001; Beale and Monaghan, 2004a), and it is seldom possible to infer biological significance based on short-term behavioral observations." EIS at IV-154.

a. Effects from seismic/noise on whales in general

"[T]here is acknowledged . . . scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales." EIS at IV-82.

"There are very few, if any, data available about potential effects of . . . noise . . . on cetacean calves." EIS at IV-82.

"[T] here are few instances where data are sufficient to evaluate the total energy exposure of a marine mammal from a given source. At present, we do not have the data necessary to make such a determination or understand how it might change our analysis." EIS at IV-86.

"While there is some general information available, evaluation of the impacts of noise on marine mammal species, particularly on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1998; NRC, 2003, 2005). This is particularly true for baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physical effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; Ketten, 1998)." EIS IV-87.

"Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency." EIS IV-87.

"Repeated long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. Ketten (1998) stated that age-related hearing loss in humans is related to the accumulation of permanent-threshold shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown." EIS at IV-88.

"There are no data on which to determine the kinds or intensities of sound that could cause a [temporary threshold shift, TTS] in a baleen whale." EIS at IV-88.

"Little data are available about how, over the long term, most marine mammal species (especially large cetaceans) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source." EIS at IV-88.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to be used for intraspecific communication. However, because real knowledge of sound sensitivity is lacking, we believe it is prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in intraspecific communication." EIS at IV-89.

"It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise." EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

"There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . oil spills on cetacean calves." EIS at IV-82.

"There are no data available to MMS that definitely link even a large oil spill [associated with seismic surveys] with a significant population-level effect on a species of large cetacean." EIS at IV-103.

"Data are not available that would permit evaluation of the potential for long-term sublethal effects [from oil spills] on large cetaceans." EIS at IV-115.

"[T]he potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-115.

"With whales, even when unusual changes in abundance occur following an event such as the EVOS (as with the disappearance of relatively large numbers of killer whales from the AB pod in Prince William Sound) (Dahlheim and Matkin, 1994), interpretation of the data is uncertain or is often controversial due to the lack of supporting data, such as oiled bodies or observations of individuals in distress (and, in that case, the existence of a viable alternate explanation of the probable mortality). Thus, the potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-115. See also *id.* at IV-117 (latter two sentences similar).

"It is not clear how long crude oil would remain on a free-ranging cetacean's skin once it was oiled." EIS at IV-117.

"The potential effect of crude oil on the function of the cetacean blowhole is unknown." EIS at IV-118. See also *id.* at IV-159.

"The effects of an oil spill on cetacean newborns or other calves and the potential effects of contact or detection of spilled oil by near-term, or post-partum females are not known." EIS at IV-121.

"[T]he potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. However, observations of cetaceans behaving in a lethargic fashion or having labored breathing has been documented in more than one species, including in gray whales after the EVOS, in which large numbers of individuals were subsequently found dead." EIS at IV-158.

"The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, reduced immune function, reduced reproduction or longer dependency periods) effects on large cetaceans from a large oil spill essentially is unknown. There are no data on large cetaceans adequate to evaluate the probability of sublethal effects. EIS at IV-160.

"The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial." EIS at IV-161.

2. Bowhead Whale

"There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur; where leases will be let; where a spill could occur; where production platforms and pipelines may be based; etc. More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially

repeated exposure to loud noise, on baleen whales. There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of either noise or oil spills on cetacean calves. Lastly, and importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales. Thus, it is difficult to predict exposure in some parts of the area where the action could occur and to understand fully the potential effects of any exposure." EIS at IV-82.

a. Effects of seismic and other noise on bowhead whale

"Uncertainty exists about the potential effects of seismic surveys on bowhead whales (especially on calf survival and growth and female reproduction) in the Chukchi Sea due to a lack of current data about their use of the Proposed Action area during periods when seismic surveys could be occurring. What is known, however, is that the observed response of bowhead whales to seismic survey noise varies among studies. Some of the variability appears to be context specific (i.e. feeding versus migrating whales) and also may be related to the whales' reproductive status and/or sex or age." EIS at II-35.

"Bowheads respond to drilling noise at different distances depending on the types of platform from which the drilling is occurring. Data indicate that many whales can be expected to avoid an active drillship at 10- 20 km or possibly more." EIS at II-36. See also *id.* at IV-194 (similar).

"The long-term response of bowheads to production facilities located at the southern end of the migration corridor is unknown." EIS at II-36.

"The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown." EIS at IV-194 (internal references omitted).

"There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur. . . ." EIS at IV-82.

"More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales." EIS at IV-82.

"Data are not sufficient to determine sex, age, or reproductive factors that may be involved in [bowhead] response to vessels. We are not aware of data that would allow us to determine whether females with calves tend to show avoidance and scattering at a greater, lesser, or at the same distances as other segments of the population." EIS at IV-109.

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"The encounter rate of bowhead whales with vessels associated with exploration would be determined by what areas were being explored. Data are insufficient for us to accurately predict the average geographic zone of activity by the support vessels and thus, to predict the additional area that could be affected by the vessels." EIS at IV-100.

"Data on reactions of bowheads to helicopters are limited." EIS IV-100.

"While it is clear that seismic activity may overlap with bowhead use of the Chukchi Sea during fall migration, it is highly uncertain about the likely extent of overlap between seismic activity and bowhead whales in the summer." EIS at IV-101.

"During fall migration, available, but dated, data indicate that overlap is likely to be greatest in the main migratory pathways, one heading nearly directly to the Bering Strait, and the other heading west from Barrow towards Wrangell Island." EIS at IV-101-102.

"It is clear that if 2D/3D seismic surveys impacted areas of the spring lead and polynya system during the spring migration, impacts could potentially be biologically significant. We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined." EIS at IV-102.

"The second situation for possibly larger than typical impacts exists in the Chukchi Sea in the autumn (e.g., late September on) as whales migrate both towards the Asian coast and toward the Bering Strait. Insufficient data exist to determine the current migration paths or the numbers of whales that might be deflected from those paths. Data are also not available to determine how intensively bowheads feed during the autumn migration in the Chukchi Sea or whether large aggregations exist in certain places due to prey resources." EIS at IV-103.

"The factors associated with the variability [of bowhead responses to drillships and other noise] are not fully identified or understood." EIS IV-105.

"There are few data on the noise [imposed on, e.g., bowheads] from conventional drilling platforms." EIS at IV-105.

"Most observations of bowheads tolerating noise from stationary operations are based on opportunistic sightings of whales near ongoing oil industry operations, and it is not known whether more whales would have been present in the absence of those operations. Because other cetaceans seem to habituate somewhat to continuous or repeated noise exposure when the noise is not associated with a harmful event, this suggests that bowheads will habituate to certain noises that they learn are nonthreatening. Additionally, it is not known what components of the population were observed around the drillship (adult or juvenile males, adult females, etc.)." EIS IV-105.

"The response of bowhead whales to construction in high use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown." EIS at IV-123.

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"The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. EIS at IV-194.

"Noise associated with ships or other boats potentially could cause bowheads to alter their movement patterns or make other changes in habitat use. Clapham and Brownell (1999) summarized that "...effects of ship noise on whale behavior and ultimately on reproductive success are largely unknown." EIS at V-23.

"[R]ecent monitoring studies indicated that most fall migrating whales avoid an area with a radius about 20-30 km around a seismic vessel operating in nearshore waters; however, there are no data that indicate that such avoidance is long-lasting after cessation of the activity." EIS at V-25.

b. Effects of oil spill on bowhead whale

"There is uncertainty about the effects on bowheads (or any large cetacean) from the event of a large oil spill." EIS at II-36.

"The potential effects to bowheads of exposure to [polyaromatic compounds, PACs] through their food are unknown. Because of their extreme longevity, bowheads are vulnerable to incremental long-term accumulation of pollutants." EIS at IV-103. See also *id.* at IV-119 (same).

"In the Biological Opinion for Federal oil and gas leasing and exploration by the MMS within the Alaskan Beaufort Sea and its effects on the endangered bowhead whale, the NMFS (2001:51) stated that: "It is difficult to accurately predict the effects of oil on bowhead whales (or any cetacean) because of a lack of data on the metabolism of this species and because of inconclusive results of examinations of baleen whales found dead after major oil releases." EIS at IV-103.

"There is great uncertainty about the potential effects of ingestion of spilled oil on bowheads, especially on bowhead calves. Decreased food assimilation could be particularly important in very young animals, those that seasonally feed, and those that need to put on high levels of fat to survive their environment." EIS at IV-118.

"It is not known if bowheads would leave a feeding area where prey was abundant following a spill." EIS at IV-118.

"The factors associated with the presence of [large aggregations of bowhead whales] are not yet clear. It is not known if they would leave the area heavily contaminated with crude oil." EIS at IV-121.

"Primarily because of the uniqueness of the bowhead and its apparently obligate use of spring lead and polynyas as its migratory path between wintering and summering grounds, MMS is uncertain of the potential severity of impact should a large oil spill occur within such a system, especially if spring migration were underway and hundreds of females were calving in or near those leads." EIS at IV-121.

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"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"In conclusion, there is uncertainty about effects on bowheads (or any large cetacean) in the event of a large oil spill. There are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area. If a large amount of fresh oil contacted a significant portion of such an aggregation, effects potentially could be greater than typically would be assumed and we cannot rule out population-level effects if a large number of females and newborn or very young calves [so this would be in spring] were contacted by a very large amount of fresh crude oil." EIS at IV-125.

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"It is unknown what effects an oil spill would have on bowhead whales, but it is likely that some whales would experience temporary, nonlethal effects from the oiling of skin, inhaling hydrocarbon vapors, ingesting oil contaminated prey, fouling of their baleen, losing their food source, and temporary displacement from some feeding areas." EIS at IV-216-217.

"Limited monitoring data prevent effective assessment of cumulative subsistence-resource damage; resource displacement; changes in hunter access to resources; increased competition; contamination levels in subsistence resources; harvest reductions; or increased effort, risk, and cost to hunters. Limited data also limit our assessment of the effectiveness of mitigation measures." EIS at V-46.

c. Effects of past activity on bowhead whale

"Available data . . . are inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior." EIS at V-25.

Also, "we cannot adequately assess potential effects on patterns or durations of bowhead habitat use. Because of the inadequacy of the data on activities, and because of the limitations inherent in studying large baleen whales, MMS was not able to assess whether there were any adverse health effects to individuals during the period of relatively intensive seismic survey activity in the 1980's." EIS at V-25.

"However, data are inadequate to fully evaluate potential impacts on whales during this period, including the duration of habitat use effects or numbers and types of individuals that did not use high-use areas because of the activities." EIS at V-27.

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d. Cumulative effects on bowhead whale

"[D]ata on other potential perturbations (e.g., past seismic surveys and oil spills) are not sufficient to clearly know the level of effects [on bowheads]." EIS at V-20.

"Whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected." EIS at V-20.

"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation area." EIS at V-20.

"There are insufficient data to make reliable predictions of the effects of Arctic climate change on bowhead whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and or injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, vessel traffic, construction, geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

3. Beluga Whale

"A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV.C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown." EIS at IV-161.

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

4. Humpback, Fin, and Other Baleen Whales

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"No studies are available specific to the effects of seismic-survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on gray and minke whale behavior as a result of seismic activity." EIS at IV-151.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking." EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

"[I]t is difficult to predict the impact of a large spill on either humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would be not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-122.

"There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age." EIS at IV-161.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

"There are no records of humpbacks killed or injured in the fisheries in which fishers self report (Angliss and Lodge, 2002), but the reliability of such data is unknown." EIS at V-29.

"The impacts of pollution and habitat degradation [on humpback whales] due to coastal development are not known." EIS at V-30.

C. Other Marine Mammals

1. Seals

"It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey." EIS at IV-147.

In the context of seals: "Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS at IV-147.

"Little information is known about oil-spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest." EIS at IV-217 (internal references omitted).

2. Walrus

a. Effects of seismic

There is "no data available to evaluate the potential response of walrus to seismic operations." EIS at IV-148.

"Quantitative research on the sensitivity of walrus to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walrus." EIS IV-148.

"Although the hearing sensitivity of walrus is poorly known, source levels are thought to be high enough to cause temporary hearing loss in other species of pinnipeds." EIS at IV-148.

"Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walrus to seismic operations." EIS IV-148.

3. Polar Bears

a. Effects from oil spills

"With the limited background information available regarding large oil spills in the offshore arctic environment, the outcome of a large oil spill is uncertain." EIS at IV-165.

b. Cumulative effects

"Quantitative data are lacking that specifically addresses the potential cumulative impacts of development on polar bears and the effects of disturbance related to human activities on polar bear habitat use, as well as recruitment and survival (Perham, 2005). There also is a high degree of uncertainty regarding the spatial scope of potential Industry activities on the Alaskan OCS." EIS at V-36. See also *id.* at V-52 (same).

III. MARINE AND COASTAL BIRDS

A. Impacts Generally

"Several areas historically documented to be important to marine and coastal birds in Sale 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species-groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high." EIS at II-37.

"The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown." EIS at IV-132.

"Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas are Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

1. *Noise impacts on marine and coastal birds*

"Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown." EIS at IV-127.

"Few studies have assessed the effects of seismic surveys on marine birds and waterfowl." EIS at IV-127.

2. *Oil impacts on marine and coastal birds*

"There are several areas historically documented to be important to marine and coastal birds in the proposed lease sale area. These areas, as well as the entire proposed lease sale area, lack site-specific data on habitat use patterns, routes and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult." EIS IV-126.

"It is unknown if exposed adult[birds] could become permanently sterilized [due to exposure to oil]." EIS at IV-133.

B. Impacts to Threatened Spectacled and Steller's Eiders⁴

"The behavioral response of eiders to aircraft overflights is unknown; some spectacled eiders nest and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences." BE at 38 (emphases added).

"Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate ..." BE at 44.

Ledyard Bay Critical Habitat Areas: "The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but could be in important staging or molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in those areas during the prolonged migration period ultimately may influence the survival of the spectacled eiders (Petersen et al. 1999)." BE at 47.

"The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for eiders within the Critical Habitat Area are also largely unknown." BE Addendum at 1.

C. Impacts to Kittlitz's Murrelets⁵

"Clearly, there is cause for concern regarding the long-term survival of the [Kittlitz's Murrelet] and the potential negative impacts of offshore oil and gas development; however, management decisions are difficult given the lack of available information." BE at 36-37.

"Though impacts of oil spills [on Kittlitz's murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999)." BE at 37.

⁴ See note 1.

⁵ See note 1.

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FEBRUARY 2010

Attachment 3
Major Problems with Oil Spill Models

"Additional information on the response of diving birds to approaching seismic survey vessels is essential to verify assumptions that there is a low potential for seabirds, including Kittlitz's murrelets, to be harmed by airgun noises." BE at 41.

D. Impacts on Waterfowl

1. *Impacts on Yellow-Billed Loons*

"Yellow-billed loons in the Chukchi Sea are at particular risk [from environmental perturbations such as disturbance, habitat alterations, and oil spills] due to their low numbers and low reproductive rate. The species is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown. Additional research could improve our understanding of the vulnerabilities of the yellow-billed and other loons using nearshore areas of the Chukchi Sea and western Beaufort Sea." EIS at IV-140-41.

2. *Impacts on Common Eiders*

"The number of [common eiders] that could be affected [by oil spill] at sea during spring or fall migration is unknown." EIS at IV-142.

E. Impacts on Shorebirds

"Dunlins are another prominent species in Kasegaluk Lagoon and Peard Bay in late summer and fall. As with other species of shorebirds and waterfowl, a spill during periods of peak abundance could impact large numbers of dunlins. Less is known about the numbers, timing, and patterns of habitat use of Kasegaluk Lagoon and Peard Bay by bar-tailed godwits but, given their recent population declines, effects of an oil spill could be particularly important." EIS at IV-144.

The Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impacts statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Because the environmental assessments for the exploration drilling proposed for the Beaufort and Chukchi Seas in 2010 assume that no large spill will occur, they do not contain any additional modeling of, or evaluation of potential effects from, a spill. The model used in the environmental impact statements suffers from substantial deficiencies:

- The model assumes that spilled oil is a point—it does not account for spreading of spilled oil, for the possibility that different parcels of a spreading oil slick may travel along different trajectories, or that these parcels may re-converge at locations distant from the spill origin, all of which are important aspects of the behavior of actual oil spills.
- Much of the environmental data input to the model is old—particularly current and wind information, which is from 1979-1996. Much has changed in the Arctic since then, and better information should be available.
- The model cannot account for the presence of sea ice. It assumes that shorefast ice exists for part of the year and that the ice "masks" the shore, which means that no oil could reach the shore.
- The model divides the leased area into a series of quadrants. Within each quadrant, it predicts that a spill could occur from a number of locations. It treats a spill from each location as equally likely and then provides an estimate of likelihood that a spill from each quadrant would reach land. This method biases the calculation in two ways. Some of the locations are further from land than others, so the model understates the likelihood of spilled oil from one of the closer locations reaching shore. Also, a spill is not equally likely from each location—Shell only wants to drill at some of them.
- The SINTEF model used to evaluate weathering effects on spilled oil is independent of the model used to estimate trajectories, making it impossible to evaluate effects related to, for example, the increasing propensity of oil to sink as it weathers.
- The model does not consider interactions with suspended particulate matter, which is crucial for determining the propensity of spilled oil to sink, thereby affecting the benthic community which is especially important in Arctic coastal marine ecosystems.
- More sophisticated and appropriate models that address the defects listed above have been available for over a decade.



July 11, 2011

Dr. James Kendall, Regional Director
BOEMRE Alaska OCS Region
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RE: REVISED DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (OCS EIS/EA BOEMRE 2010-034)

Dear Dr. Kendall:

Thank you for the opportunity to provide comments on the Revised Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (Revised Draft SEIS) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act. TWS submitted comments on the Draft SEIS on November 30, 2010 and those comments are incorporated by reference.

The Wilderness Society (TWS) contributed to and supports the comments submitted by Alaska Wilderness League, *et al.* on this Revised Draft SEIS, however we are submitting these comments to highlight additional items we would like BOEMRE to address. As for my background, I have over 25 years of engineering experience in the private, governmental, and non-profit sectors, and I am a licensed professional engineer in Alaska. I have presented invited testimony to Congress on numerous occasions on oil and gas issues, I served as a technical advisor on the Department of the Interior's report to the President delivered on May 27, 2010 containing recommendations for BOEMRE following the *Deepwater Horizon* spill, and I am the sole Alaskan member of BOEMRE's Ocean Energy Safety Advisory Committee.

TWS has approximately 225,000 members nationwide and over 750 members in Alaska who share an interest in how the Arctic Ocean is managed because of its inherent value and because decisions involving the Arctic Ocean could affect federal lands in northern Alaska. TWS has a strong concern for the sound management and the well-being of the largest public land management unit in the U.S., the National Petroleum Reserve – Alaska, with a good portion of its coastline located adjacent to the Chukchi Sea.

The USGS Report and its Relevance to the Revised Draft SEIS

During a meeting on June 1, 2011 which included Eric Myers from Alaska Audubon, you, and me we discussed the applicability of the United States Geological Survey's (USGS)' science gap and

sufficiency' report¹ that was to be released later in June. I recall you said that if the report was issued prior to the end of the public comment period, its contents and analyses would be considered in the Revised Draft SEIS. Since USGS issued the report on June 23, 2011, TWS requests that BOEMRE respond to the detailed findings in this report, including whether the individual gaps identified (some of which can be remedied relatively easily like some types of oceanographic data and some of which require a long-term plan to address) need to be filled prior to Lease Sale 193 decision-making. While TWS recognizes there always will be scientific gaps, the key question for BOEMRE and the Secretary of the Interior regarding Lease Sale 193 is do we know "what we need to know to develop our Arctic energy resources in the right places in the right way"²? TWS contends that, at this point, there are biological, ecological, weather, oceanographic, and climate change data and considerations that have not been sufficiently investigated and analyzed in order to make "responsible decisions"³ on oil and gas exploration and development in the Beaufort and Chukchi Seas.

The Revised Draft SEIS' Very Large Oil Spill Analysis

TWS is pleased that BOEMRE included in the Revised Draft SEIS quantification of a hypothetical Very Large Oil Spill (VLOS) in the Lease Sale 193 area and discussion of its potential impacts. The Revised Draft SEIS shows that such of spill could be of roughly the same order of magnitude as the BP *Deepwater Horizon* spill in 2010 in the Gulf of Mexico.

While TWS agrees that coastal-area deferrals would minimize many of the impacts from a VLOS, not all adverse impacts are correlated with the SEIS alternatives. For example, in offshore areas which cetaceans frequent during particular times of the year, a VLOS may have very significant feeding implications depending on the location, size, timing, and duration of such a spill. This type of spill scenario has not been sufficiently analyzed in the Revised Draft SEIS given the limitations of looking at only the SEIS Lease Sale alternatives.

Last, according to the Revised Draft SEIS, there has been 1 well control incident per 201 exploration wells drilled (p. 123). As a result of these and other data, BOEMRE characterizes a VLOS in the Revised Draft SEIS as a "low probability, high impact" event. In her testimony to Congress, Dr. Nancy Leveson from MIT - an expert in system safety engineering - advises against such a characterization:

Belief that process accidents are low probability: Referring to accidents as "low probability, high consequence" events is rampant and unique to this industry [and within BOEMRE]. The implication is that accidents are low probability no matter how the system is designed or operated. Labeling is used to prove that accidents are rare. While process accidents may be low frequency, they are not necessarily low probability... This mislabeling leads to the belief that nothing can be done about such events nor does

¹ Holland-Bartels, Leslie, and Pierce, Brenda, eds., 2011, An Evaluation of the Science Needs to Inform Decisions on Outer Continental Shelf Energy Development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370.

² Quote by Secretary of the Interior Salazar in the news release announcing release of the USGS report, USGS Arctic Study Evaluates Science and Knowledge Gaps for OCS Energy Development; Offers recommendations to better inform responsible oil and gas decisions for Beaufort and Chukchi Seas, June 23, 2011.

³ *Ibid.*

3

anything in particular need to be done to reduce their probability—they are by definition already low probability.⁴

TWS urges BOEMRE to use the terminology, "low frequency" rather than "low probability" to describe the likelihood of blowouts or VLOS events.

Thank you for your attention to these comments.

Respectfully submitted,

Lois N. Epstein, P.E.
Engineer and Arctic Program Director
The Wilderness Society

⁴ Leveson, Nancy G., "Risk Management in the Oil and Gas Industry," testimony before the U.S. Senate Committee on Energy and Natural Resources, May 17, 2011, unpaginated.

Corporations and Industry Groups

PUBLIC SUBMISSION

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 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0021
 Comment from walter williamson, Air Liquide America

Submitter Information

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Organization: Air Liquide America

General Comment

Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.



Alaska Miners Association, Inc. Comment

ALASKA MINERS ASSOCIATION, INC.

3305 Arctic Blvd., #105, Anchorage, Alaska 99503 • (907) 563-9229 • FAX: (907) 563-9225 • www.alaskaminers.org

July 11, 2011

Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

RE: Comments on *Outer Continental lease Sale*193 *RDSEIS*

Thank you for the opportunity to provide comments on the "*Outer Continental Lease Sale 193 SEIS*". Recent global developments, including unrest in the Arab world, provide abundant justification for exploring and responsibly developing domestic energy and mineral resources that are critical to the economic and strategic security of the United States.

The Alaska Miners Association (AMA) is a non-profit membership organization established in 1939 to represent the mining industry. The AMA is composed of more than 1200 individual prospectors, geologists and engineers, vendors, small family miners, junior mining companies, and major mining companies. Our members look for and produce gold, silver, platinum, diamonds, lead, zinc, copper, coal, limestone, sand and gravel, crushed stone, armor rock, etc. Availability of reasonably priced energy is critical to the mining industry in Alaska. AMA supports responsible exploration for and development of the nation's offshore oil and gas resources and reducing our dependence on foreign sources of supply.

Oil and gas resources provide for more than 60% of the Nation's energy needs and are especially important to the transportation and industrial segments of the U.S. economy (<http://onto.era.doe.gov/>). This is extremely significant for the mining industry which depends largely on mobile equipment powered by diesel engines. These commodities will continue to provide for the majority of the Nation's energy needs well into the future. They are also used to generate dependable sources of base load energy which cannot be substantially replaced by renewable energy sources like wind and solar which are expensive and unreliable sources of base load energy. The question facing America is whether to develop our own oil, gas, and mineral resources or become increasingly dependent on foreign sources of supply.

The AMA supports affirmation of the 2008 Lease Sale 193 for the following reasons:

Offshore energy exploration and production are vital components of our national energy strategy. U.S. demand for oil and natural gas are projected by the Department of Energy to increase for the foreseeable future. More importantly, OCS development creates and supports hundreds of thousands of jobs throughout the U.S. economy. Offshore energy operations in Alaska stand ready to provide this nation with significant oil and gas resources – resources that

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Alaska Miners Association, Inc. Comment

can be produced safely right now. The Alaska OCS lease sale 193 has potential for the discovery of mega fields in relatively shallow water depths (<300 feet).

Offshore energy development is important to the mining industry. AMA supports lease sales that offer additional potential for the production of strategically and economically important quantities of oil and gas. These energy resources are needed by the energy intensive Alaska minerals industry.

Diversification of the Nation's energy supplies is critical to national security. AMA supports efforts by the United States to diversify its sources of energy and encourage an energy policy that advocates domestic development of both renewable and non-renewable energy resources. Development of Alaska's OCS hydrocarbon resources will support this goal by helping to diversify domestic sources of oil and gas away from the Gulf Coast Region (GCR) and help reduce the Nation's energy imports. International unrest and extreme weather conditions will continue to affect hydrocarbon production and availability. However, diversification of our energy sources will help alleviate future energy shortages.

The United States must responsibly move forward with domestic offshore energy exploration and development to meet our future energy needs. OCS Lease Sale 193 is a step in the right direction. We also encourage BOEMRE to include revenue sharing with states and local communities in its leasing plan. Those areas most directly affected by oil and gas development should share in the revenues generated.

Sincerely,

Steven C. Borell, P.E.
 Executive Director

Cc. Senator Lisa Murkowski
 Senator Mark Begich
 Congressman Don Young
 Governor Sean Parnell

July 11, 2011

Comments on the Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 c/o Regional Director James Kendall
 BOEMRE - Alaska OCS
 3801 Centerpoint Drive Ste. 500
 Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Alaska Safety, Inc.

Melissa VanNoy
melissa@alaskasafety.com

4725 Central, Anchorage, AK 99503 8715 Kask-Good Bay Road, Suite 1
 Anchorage, AK 99514
 PH: (907) 561-5661 FAX: (907) 561-5661
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PUBLIC SUBMISSION

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 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0043
 Comment from Doug Ward, Alaska Ship & Drydock, Inc.

Submitter Information

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Organization: Alaska Ship & Drydock, Inc.

General Comment

July 9, 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea
 Yesterday's disappointing announcement that the economy generated only 18,000 new jobs in June driving unemployment to 9.2 % is disappointing. Accompanied by news that the unemployment rate would be even higher (over 16%), if over a quarter million Americans had not stopped their search for work is alarming and compels me to urge BOEMRE to finalize and affirm the latest Revised Draft Supplemental Environmental Impact Statement (SEIS) as quickly as possible to facilitate rebuilding America's workforce.

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I have reviewed the Revised Draft SEIS for the Lease Sale 193 Chukchi Sea and believe that it provides sufficient information and analysis to support an informed decision affirming Lease Sale 193 Chukchi Sea. By reference, I endorse and incorporate comments by the Resource Development Council, found at <http://www.akrdc.org>, urging affirmation of this Lease Sale 193. I also incorporate information provided in the reports titled Economic Analysis of Future Offshore Oil and Gas Development: Beaufort Sea, Chukchi Sea, and North Aleutian Basin, March 2009, and Potential National-Level Benefits of Alaska OCS Development, February 2011, prepared by Northern Economics and Institute of Social and Economic Research, University of Alaska Anchorage that project positive employment and economic returns that could be generated over the next 50 years mitigating the alarming and chronic unemployment and discouragement that exists most recently in the nation and for over 15 years in Southeast Alaska.

I urge BOEMRE to consider the positive economic influence that 40 years of oil and gas activity in the North Atlantic has had in creating the in St. John's, Newfoundland, and Labrador Ocean Technology Cluster - an industry le

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P.O. Box 7655
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 (907) 225 8847
 FAX (907) 225 8254

July 11, 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea
 Dear Mr. Kendall:

I appreciate all the additional steps the Bureau of Ocean Energy Management, Enforcement, and Regulation (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and I believe the revised Draft Supplemental Environmental Impact Statement (EIS) rightfully determines a very large oil spill remains highly unlikely. While I agree the BOEMRE needs to take all thoughtful precautions, I think this most recent EIS concludes that development of Alaska's offshore resources can proceed safely.

As the revised draft EIS states, a very large oil spill in the Chukchi is highly improbable given the history of exploratory drilling and well control incidents in the Outer Continental Shelf (OCS). Since 1971, 84 wells have been drilled in the Alaska region alone, all without incident. Moreover, the proposed drilling in the Chukchi would occur in waters similar in depth to the shallow-waters in the Gulf of Mexico, which boasts a long history of safe operations. The *Deepwater Horizon* blowout and resulting very large oil spill in the Gulf of Mexico, conversely, was the first incident of this magnitude in nearly 40 years of OCS exploration.

Notwithstanding, producers and regulators have made significant investments - both in time and resources - to ensure all drilling proceeds in the safest manner possible. Pursuant to the Notice to Lessees 06, producers were required to reassess the potential impacts of a worst-case discharge. As such, Shell revised its exploratory plan for the Chukchi Sea using calculations of spill estimates based on the known geology of the basin and has since determined that the company maintains the capacities needed to prevent a blowout and respond swiftly and effectively in the unlikely event a blowout occurs.

The revised supplemental EIS notes that since 1979, for every 130 billion barrels of oil produced, one well incident resulting in a very large oil spill has occurred - though one-third of these spills have been the result of military action. Clearly, the probability of a well incident is very low, even if some risk exists. Given the economic and energy security benefits of increased domestic oil production, I believe this minimal risk is acceptable, particularly because of the advanced response capabilities in place.

I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Sincerely,

John Thompson,
 General Manager



Driving Trucking's Success

American Trucking Associations
 950 N. Glebe Road, Suite 200, Arlington, VA 22203

Richard Moskowitz
 Vice President and Regulatory Affairs Counsel

July 1, 2011

James Kendall, Regional Director
 BOEMR - Alaska OCS
 3801 Centerpoint Drive, Suite 500
 Anchorage, AK 99503-5820

Re: Comments on the Revised Draft SEIS, Lease Sale 193 - Chukchi Sea

Dear Mr. Kendall:

The American Trucking Associations¹ ("ATA") is writing to urge the Bureau of Ocean Energy, Management, Regulation and Enforcement ("BOEMR") to finalize the environmental impact statement supporting the Chukchi Sea Lease Sale 193. Developing our domestic petroleum reserves in the Chukchi Sea is critically important to reducing our dependence on foreign oil.

The trucking industry is the backbone of this Nation's economy with nearly 7 million Americans working in trucking-related jobs. Trucks move 70% of our Nation's freight tonnage and earn 82% of the Nation's freight revenue. The trucking industry delivers virtually all of the consumer goods in the United States.

This year, the trucking industry will consume over 35 billion gallons of diesel fuel. Each one-cent increase in the average price of diesel costs the trucking industry an additional \$356 million a year in fuel expenses. The trucking industry is on pace to spend more than \$135 billion on fuel this year -- \$34 billion more than we spent in 2010, and \$56 billion more than in 2009.

¹ ATA is a united federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interests of the trucking industry. Directly and through its affiliated organizations, ATA encompasses every type and class of motor carrier operation.



Today it may cost over \$1,000 to refuel a long-haul, over-the-road truck. Our industry is overwhelmingly comprised of small businesses that operate in extremely competitive business environments, with narrow profit margins now being radically impacted by high fuel prices.² The future of these trucking companies is at risk when the price of fuel spikes. In addition, soaring and volatile fuel prices are a serious threat to the broader economy, adversely impacting both the cost of goods and our ability to move them affordably throughout the country.

The trucking industry has developed a sustainability plan and continues to pursue new technologies and operating procedures to reduce fuel consumption.³ Even with the most aggressive fuel conservation program, the trucking industry will continue to demand additional diesel fuel to deliver an increasing volume of freight. The trucking industry also embraces the voluntary use of alternative fuels (e.g., renewable diesel and natural gas); however, these alternatives present both economic and operational challenges for many fleet and additional research and investment incentives are needed to overcome these challenges. The trucking industry is a very diverse industry and while some segments of the industry may be able to operate on alternative fuels, large segments of the trucking industry will continue depend upon a plentiful supply of diesel fuel for the foreseeable future.

That is why it is critical to the trucking industry that we have an abundant supply of affordable petroleum-based diesel fuel. We understand that the recent run-up in fuel prices is due to several factors, some of which are beyond the government's ability to control. Regulatory obstacles to increased production, however, can and should be corrected. Current regulatory policy has put our country on a path of declining domestic supply and has resulted in an unnecessary increase in the current price of oil. While some of the price increase may be the result of excessive speculation; this speculation is fueled by a perception that the supply of available crude oil will decline as a result of numerous factors, including the reduction in the U.S. ability to produce crude oil. The United States is the third largest oil producer in the world, but production of oil from Alaska (and the Gulf of Mexico) is declining and new sources of production have been placed off-limits. Without a concerted effort to drill more wells, domestic oil production will continue to decline and the price of we pay for diesel fuel will increase.

Lease Sale 193 has undergone a series of extensive environmental reviews that began more than 4 years ago. The draft SEIS demonstrates that oil and gas development in the Chukchi Sea can be done safely. As such, we urge BOEMRE to finalize the environmental impact statement and move forward with Lease Sale 193 so that

² Roughly 96% of all interstate motor carriers operate 20 or fewer trucks.

³ A copy of ATA's sustainability plan may be viewed through the following link:
<http://www.trucksdeliver.org>.

Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security and generate significant new revenue for the federal government. With an estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy security. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years.

The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. The United States reliance on imported oil places U.S. consumers at greater risk of supply disruptions and damaging price spikes. Volatile diesel prices harm the trucking industry and jeopardize the U.S. economy. Expanding our domestic production will increase our energy security and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

* * * * *

The benefits of energy production on Alaska's OCS are critically important to our domestic energy security and to the trucking industry, which depends upon a stable supply of diesel fuel to deliver virtually all consumer goods in the United States. As we begin a transition to alternatives, we must not forget that the trucking industry and our economy will continue to depend upon diesel fuel for the foreseeable future. The failure to boost domestic fossil fuel supplies during this transition will simply translate into increased dependence on foreign sources of oil, damaging fuel price spikes, and a continuing threat to our economy and national security.

For these reasons ATA believes there is an urgent need to increase access to and production of our domestic crude supply as a means to help lower fuel prices. We therefore urge BOEMRE to finalize the environmental review process and move forward with Lease Sale 193.

Respectfully submitted,



Richard Moskowitz
Vice President and Regulatory Affairs Counsel

July 2011
Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of **Anchorage Republican Women's Club**, we would like to express our strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. We are part of a state-wide organization of over 600 women and we appreciate the opportunity to submit a public comment on the revised Draft Supplement Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Regards,
Judy Eledge
ARWC President
Anchorage, AK

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplement Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,



Domestic & Industrial Pump Sales & Service
Community Water Systems - Well Servicing
Red Jacket Pumps - Sensaphone Monitors
Pump Instrumentation - Controls - Panels



Alaska Oil and Gas Association
 121 W. Fireweed Lane, Suite 207
 Anchorage, Alaska 99503-2035
 Phone: (907) 272-1481
www.aoga.org



American Petroleum Institute
 1220 L Street, NW
 Washington, DC 20005
 Phone: (202)682-8000
www.api.org

July 11, 2011

James Kendall
 Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, AK 99503-5820

Re: Revised Draft SEIS, OCS Oil and Gas Lease Sale 193, Chukchi Sea, Alaska

Dear Mr. Kendall:

The American Petroleum Institute ("API") and the Alaska Oil and Gas Association ("AOGA") appreciate this opportunity to submit comments on the Revised Draft Supplemental Environmental Impact Statement ("SEIS"), Outer Continental Shelf ("OCS") Oil and Gas Lease Sale 193, Chukchi Sea, Alaska. API is a national trade association that represents over 470 members involved in all aspects of the oil and natural gas industry. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining, and marketing activities in Alaska.

We endorse the comments on the Revised Draft SEIS being submitted by Shell Gulf of Mexico Inc. ("SGOMI") and encourage the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") to consider and incorporate the suggestions contained therein. We offer the following additional comments.

The purpose of the SEIS is for BOEMRE to provide new National Environmental Policy Act ("NEPA") analysis as directed by the U.S. District Court for Alaska in a July 2010 order. The order instructed BOEMRE to address three specific concerns: (1) the environmental impact of natural gas development; (2) whether missing information identified in the original EIS was essential or relevant under 40 CFR 1502.22; and (3) whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. BOEMRE completed this analysis and released a Draft SEIS in October 2010. Following a public comment period, BOEMRE announced in March 2011 that it would also analyze a Very Large Oil Spill ("VLOS") from a hypothetical exploration well blowout. API and AOGA believe that the detailed analysis

James Kendall
 Regional Director
 July 11, 2011

BOEMRE recognizes and refers to the VLOS as a "low-probability, high impacts" event, but does not explain how it arrived at this characterization or how unlikely such an event would be. BOEMRE included an assessment of the probability of a VLOS occurring in Appendix B, but not in the text of the SEIS. BOEMRE should cross-reference, summarize, and/or otherwise provide this information in the appropriate sections of the SEIS document to provide more guidance to the reader. BOEMRE should also highlight the extreme assumptions used to construct the VLOS scenario to better contextualize the probability of such an event occurring in the real world. This would avoid the inaccurate potential expectation by decision-makers and the public that the VLOS scenario applies to each and every well for which permit approval is sought.

We commend BOEMRE for including in the SEIS information about oil spills from blowout events on the OCS from 1971-2010. This data shows how rare large scale spill events are. BOEMRE should, however, clarify that spill events do not always result from well control incidents and in fact, past experience and history show that spill events from well control incidents have not occurred more often than they have. For example, as BOEMRE appropriately acknowledges in the SEIS, of the 249 well control incidents that occurred during exploratory and development/production activities over 38 years (1971-2009) only 50 resulted in oil spills. Importantly, the total spilled from these incidents was less than 2000 barrels of oil.

BOEMRE should also clarify that the VLOS scenario analyzed in the SEIS does not include the beneficial effects of cleanup, recovery, and intervention efforts (on the estimated spill volume or spill duration) and explain why the analysis does not include these effects. This distinction is important since oil spill contingency and response plans are required prior to the approval of any OCS exploration or development and production plan. Clearly, in the unlikely event that a blowout does lead to an oil spill, these activities would help decrease the spill volumes reaching the environment and the duration of an uncontrolled flow. Including such a discussion would help provide better context to the VLOS scenario.

The regulatory and administrative changes made by BOEMRE following the Deepwater Horizon incident serve to increase safety and further reduce the risk of blowouts and oil spills on the OCS. We commend BOEMRE for providing a discussion of these changes in the SEIS, including the Notices to Lessees ("NTL"), but believe this discussion could be strengthened by a more complete description of the intent and requirements of the changes as well as the beneficial impacts they will have on safety and the probability of a VLOS or other large scale spill event from occurring. In addition, many new studies and data collection efforts are currently underway that are helpful to the Natural Resources Damage Assessment process. The ongoing nature of these studies, however, which are likely to continue for decades, does not diminish or adversely affect the agency's ability to conclude that there is no incomplete or unavailable information that is deemed relevant to making a determination regarding reasonably foreseeable significant adverse impacts of new leasing operations in the Chukchi Sea Planning Area or that is essential to a reasoned choice among alternatives.

James Kendall
 Regional Director
 July 11, 2011

provided in the Revised Draft SEIS, along with other supporting environmental documents and additional assessments being conducted by BOEMRE, provide a thorough analysis upon which to make decisions related to Lease Sale 193, new or revised exploration and development plans in the Chukchi Sea Planning Area, and future permit applications, without delay. We also support BOEMRE's continued practice of tiering Environmental Impact Statements ("EIS") and Environmental Assessments ("EA") under NEPA. The Revised Draft SEIS, issued on May 27, addresses both the deficiencies identified by the court and a hypothetical VLOS scenario and recommends that Lease Sale 193 be affirmed as held. API and AOGA urge the Secretary to accept the conclusions of the SEIS and expeditiously affirm the sale so that the suspension of operations imposed on the leases may be removed.

Natural Gas Development and Production

The SEIS considers the most viable natural gas development and production scenario for the Chukchi leases – including use and potential expansion of existing infrastructure (due to oil development and production) and an offshore/onshore gas pipeline transportation system in the same corridor as existing pipelines – in the context of the alternatives analyzed (and evaluated to the satisfaction of the Court) in the original EIS for Lease Sale 193. On this point, the SEIS correctly assumes that first commercial gas production would only follow the oil exploration, development, and production activities already analyzed in the Final EIS (and deemed sufficient by the Court). Gas production would utilize the same oil production platform described in the original EIS, no additional exploration seismic surveys are expected, no additional exploration or development well drilling is anticipated, and no produced water discharges would occur. For each resource category identified, BOEMRE determined that natural gas development and production would either not have any significant adverse impacts or that potential impacts could be avoided or mitigated through stipulation and mitigation measures, adherence to construction protocols, and compliance with existing law and regulation. We support this analysis.

Missing Information

BOEMRE conducted an extensive evaluation effort with regard to the missing information identified by the Court and determined that while many items of incomplete, missing or unavailable information were relevant to the issues at hand, none were essential for a reasoned choice among alternatives. We also agree with this analysis and conclusion.

Very Large Oil Spill

We commend BOEMRE for the comprehensive VLOS analysis contained in the SEIS. However, we suggest that BOEMRE clarify exactly what the VLOS scenario is and the differences between the VLOS and the worst case discharge analysis associated with an actual exploratory well plan.

BOEMRE correctly emphasizes that the VLOS is hypothetical, that the discharge numbers associated with it do not reflect any particular well, and that any operator that proposes drilling a well must provide its own worst-case discharge analysis based on the unique characteristics of the well prior to an exploratory plan being approved and well drilled. However, BOEMRE should better explain the probability of a VLOS actually occurring. Throughout the SEIS,

James Kendall
 Regional Director
 July 11, 2011

Important to emphasize moving forward is that this is a lease sale, which authorizes lessees to engage only in "ancillary activities" that do not harm the environment. Parties seeking to conduct ancillary activities are required to notify BOEMRE, and the proposed activities are reviewed for compliance with performance standards contained in federal regulation. A lease sale is not an authorization to drill. Further environmental review, public process and federal agency approvals are required before any exploration, development or production activities may occur.

Lessees seeking to engage in these activities must submit an exploration plan or a development and production plan for BOEMRE review and approval, which involves the preparation of the appropriate level of environmental review by BOEMRE. Importantly, in the SEIS, BOEMRE specifically puts lessees on notice that it intends to prepare an EIS for any development and production plan submitted for a lease issued from Lease Sale 193. As BOEMRE acknowledges in the SEIS, an EIS for development and production activities typically takes 2-3 years, which allows time for exhaustive environmental review and public process of those specific activities. Proposed plans are evaluated for compliance with applicable regulations, lease stipulations, and other requirements, including the adequacy of the oil spill response plan. Prior to conducting any drilling operations, the lessee must submit and obtain approval for an Application for Permit to Drill ("APD"). The rulemaking which followed the Deepwater Horizon incident, as well as the new NTLs, augment and strengthen prior regulatory and administrative requirements for exploration plans, development and production plans, and permitting on the OCS, including the Chukchi Sea.

Importance of New Production for Continued Throughput for the Trans-Alaska Pipeline System

The importance of oil and gas development on Alaska's OCS cannot be overstated. According to resource estimates, including those performed by the U.S. Geological Survey, this largely untapped area may hold as much as 27 billion barrels of oil and 132 trillion cubic feet of natural gas. By comparison, total production from the Alaska North Slope is approximately 16 billion barrels of oil. Development of the oil and gas resources in the Chukchi Sea will not only add to domestic energy supplies and our nation's energy security, but such development is also necessary for the continued operation of the Trans-Alaska Pipeline System ("TAPS"). TAPS has been identified as critical infrastructure for national security because of the transportation link that it provides to present and future development of crude oil resources in Alaska's Arctic region. The significance of the subject of diminishing Alaska production to provide throughput for TAPS merits more detailed discussion.

Since commencement of its operation in August of 1977, TAPS has proven to be a strategically critical component of America's energy infrastructure. Designed as a 48 inch pipeline, TAPS has transported over 16 billion barrels of American oil from the Alaska North Slope to the Valdez Marine Terminal, from which tankers carry the oil to U.S. West coast terminals and refineries. At its peak in the late 1980s, TAPS was transporting about 2.1 million barrels of crude oil per day, or about 25 percent of our nation's domestic crude oil supply. Since 1989, there has been a steady decline in Alaska North Slope production, and current average TAPS throughput is about 600,000 barrels per day compared to 2 million barrels per day in 1988, or about one-third of its

capacity and now approximately 11 percent of our nation's oil production. Over the same period, while production from existing fields has diminished, efforts to find and develop potentially promising new crude oil resources in Alaska's Arctic Outer Continental Shelf have been stymied by regulatory delays and litigation.

Decreasing oil throughput presents significant challenges for the operators of TAPS. Notable among these is the fact that the temperature of the oil flowing through the line decreases as flow or throughput rates decline. With lower flow rates it takes longer for the crude oil to move from the current production areas on the North Slope to the Valdez Marine Terminal where the tankers are loaded. This allows more time for the oil to cool.

During peak production in 1989, it took approximately four and a half days for Alaska North Slope crude oil production to travel the pipeline's 800 mile length to reach Valdez. Today, each barrel takes about 15 days to move through the pipeline. Were the throughput rate to diminish to 300,000 barrels per day, it would take just over a month for a barrel of oil to move the entire length of TAPS. In the not too distant future, were present trends to continue, crude oil temperatures in the line could become cold enough to accelerate wax deposition and even possible ice formation in the pipeline. These situations present operational challenges because they make conditions favorable to corrosion more likely, and greatly increase the cost and complexity of maintenance and repairs along the pipeline.

As noted, TAPS is among the most important components of our nation's energy transportation infrastructure. While its maintenance and operational record has been exemplary, if production from existing Alaska North Slope fields that now moves through TAPS continues to decline, and administrative and litigation-driven barriers prevent the discovery and development of new crude oil resources such as those in the Chukchi Sea, the continued operation of one of America's energy supply lifelines could be prematurely placed at risk decades before the end of its useful design life. Access to the crude oil resource potential both onshore and offshore Alaska is thus important not only for the additional supplies of domestically produced energy that discovery and development of those resources would bring, but the continued viability of TAPS which depends upon increasing safe and environmentally responsible production.

Importance of Chukchi Sea Production to Economic Health of State of Alaska and the U.S.

The oil and gas industry accounts for more than 41,000 jobs in Alaska, which is 9.4 percent of all employment in the state and 11.2 percent of all wages at \$2.4 billion. Employment and payroll include direct impacts of 4,497 jobs and \$643.8 million in payroll for the primary companies. Indirect and induced impacts include \$5 billion in industry spending in Alaska on goods, services and capital, generating 8,000 support industry jobs and \$769.2 million in payroll. Almost 29,000 additional jobs, with \$987 million in payroll, are created throughout the rest of the state by support industry spending on payroll and purchasing, and by primary company employee spending.

advancement of knowledge and conservation of habitat, wildlife, and subsistence resources in the region.

In conclusion, API and AOGA strongly urge the Secretary to affirm Chukchi Sea Lease Sale 193, as recommended by the SEIS. The leases issued under Sale 193 were sold only after exhaustive environmental analysis, and the specific concerns the District Court raised are adequately addressed by the SEIS. Moreover, the SEIS analyzes a VLOS, which is hypothetical and extremely unlikely. Any further exploration or development activities would not occur until additional environmental review, public process, and BOEMRE approval occurs. Failure to affirm Lease Sale 193 would allow the moratorium on exploration and development of Alaska's OCS to continue harming the Alaska and U.S. economies and the nation's energy security without a corresponding benefit to the environment.

If you have any questions on these comments, please do not hesitate to contact Kate Williams with AOGA at 907.272.1481 or Richard Ranger with API at 202.682.8057.

Sincerely,

KATE WILLIAMS
Regulatory Affairs Representative

RICHARD L. RANGER
Senior Policy Advisor

An analysis by the University of Alaska Anchorage showed the oil industry supports as many as 110,000 jobs in Alaska (one-third of the state's workforce), including funding for three-quarters of state government jobs. The report does not merely count the number of jobs that exist in each industry and its support sector. It estimates how many of Alaska's 357,000 jobs rely on cash flow created by a specific sector. The Anchorage Economic Development Corporation has reasoned that the total spinoff from oil and gas activity, state revenues and employment accounts for approximately 40 percent of Alaska's economy.

According to a recent study by Northern Economics and the University of Alaska, an annual average of 54,700 new jobs would be created and sustained through the year 2057 from the Alaska OCS, with 68,600 during production and 91,500 at peak employment. A total of \$145 billion in new payroll would be paid to employees through the year 2057, including \$63 billion to employees in Alaska and \$82 billion to employees in the rest of the U.S. In addition, a total of \$193 billion in government revenue would be generated through the year 2057, with \$167 billion to the Federal government, \$15 billion to the State of Alaska, \$4 billion to local Alaska governments, and \$6.5 billion to other state governments. In short, action to expedite completion of the SEIS and to affirm the lease sale will provide considerable benefit to the nation's economic and employment situations, and will be of profound importance to the economic health and well-being of the State of Alaska.

Concluding Remarks

Lease Sale 193 is one of the most successful oil and gas lease sales in U.S. history, generating \$2.7 billion in revenues for the federal government for 487 leases. However, over four years later, not a single exploratory well has been drilled and production activities are at least a decade away.

Exploring for oil and gas offshore in Alaska is not a new concept. A total of 30 wells have been drilled in the Beaufort Sea and five wells drilled in the Chukchi Sea. These wells were drilled over 20 years ago using older technology. Today's technology has resulted in reduced environmental impacts and footprints for infrastructure for oil and gas development projects. Advancements in 3-D and 4-D seismic technology allow industry to focus their "targets," reducing impacts even more. Moreover, there has never been an oil spill caused by a blowout from offshore exploration and production drilling in state or federal waters off Alaska or the Canadian Arctic.

Alaska's North Slope and OCS are now perhaps the most studied energy basins in the U.S. In the past decade alone, over 250 scientific studies have been funded in the Arctic, with the majority focused the Beaufort and Chukchi Seas. All told, at least \$500 million has been spent on more than 5,000 independent studies since 1973. In this effort, Alaska's oil and gas industry has proven itself to be an important partner not only in the development of the Arctic, but in expanding our knowledge of an Arctic environment in which the industry has explored for and produced energy resources for nearly 40 years. This operating record demonstrates that a balance is achievable in the Arctic between production of valuable and needed energy resources and



June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT DIVISION
ANCHORAGE, ALASKA

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed. We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,
ARCTIC CONTROLS, INC.

Scott A. Stewart
President

July 7, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE – Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of the Association of Equipment Manufacturers (AEM), I would like to express our support of oil and gas exploration in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to conclude the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th.

AEM is the U.S.-based international trade group serving the off-road equipment manufacturing industry. AEM members number over 850 companies that manufacture equipment products and services used worldwide in the agriculture, construction, forestry, mining and utility fields. AEM members are strong supporters of policies that enhance America's energy independence. Expanded domestic energy production not only improves national security but also generates homegrown economic growth and demand for a wide-array of equipment.

Lease Sale 193 has undergone extensive environmental review and the potential environmental impacts have undergone lengthy and thorough analysis. Oil and gas exploration in the Chukchi Sea can and should be done safely. The time has come for the government to proceed with Lease Sale 193 so that America can fully realize the energy and economic benefits increased domestic energy production will bring. Additionally, the government can expect significant revenues from the oil and gas exploration in Alaska's OCS.

Alaska's OCS is conservatively estimated to contain 27 billion barrels of oil and 132 trillion cubic feet of natural gas. The development of this tremendous national resource is vital to our country's long-term energy supply. It is estimated the economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated.

Furthermore, the opening of Alaska's OCS to oil and gas exploration would help achieve greater price stability for consumers at a time when price volatility is a hindrance to economic growth. The United States also continues to import vast amounts of oil from unstable and hostile countries despite the considerable North American resources available. Forcing us to rely on oil imports puts the United States at greater risk of being held hostage to supply disruptions.

Again, thank you for the opportunity to comment. I urge that the lease-holders be allowed to move forward with planned exploration and development in a safe and responsible manner.

Sincerely,


Nick Yaksich
Vice President
Global Public Policy

James Kendall
Regional Director
BOEMRE – Alaska OCS
3801 Centerpoint Drive
Suite 500
Anchorage, AK 99503-5820

Dear Mr. Kendall:

Associated Industries of Florida (AIF) welcomes the opportunity to provide comments to the Department of Interior's revised Draft Supplemental Environmental Impact Statement, announced by BOEMER on May 20, 2011. We respectfully submit the following comments in support for oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS).

Florida, the fourth largest state, uses 27 million gallons of gasoline and diesel per day and generates more than half of its electricity from clean burning natural gas. Florida's economy, which continues to languish with unemployment hovering around 10.5 percent, is heavily dependent on affordable and reliable oil and natural gas; access to additional domestic resources is critical to rebuild the tourism, agriculture, and manufacturing base of our economy.

The importance of oil and gas development on Alaska's OCS cannot be overstated. This largely untapped area holds 27 billion barrels of oil and 132 trillion cubic feet of natural gas. By comparison, total production from the North Slope is 16 billion barrels of oil. Development of these resources is necessary for the continued operation of the Trans-Alaska Pipeline System ("TAPS"), which delivers 11% of domestic oil production to refineries on the West Coast and has been identified as critical infrastructure for national security. TAPS is currently operating at one-third of its capacity, or 600,000 barrels of oil per day compared to 2 million barrels per day in 1988, and will face operational challenges without additional supply.

Furthermore, an annual average of 54,000 new jobs in Alaska and the rest of the U.S. would be created and sustained by OCS-related development for 50 years. This translates into \$63 billion in payroll to employees in Alaska and \$82 billion to employees in the Lower 48. Federal, state and local governments would realize \$193 billion in revenues. Clearly, development of Alaska's OCS resources is vital to the nation's energy security and would help turn the tide against the economic recession we are now facing. Exploring for oil and gas offshore in Alaska is not a new concept. A total of 30 wells have been drilled in the Beaufort Sea and five wells drilled in the Chukchi Sea. These wells were drilled over 20 years ago using older technology. Today's technology has resulted in reduced environmental impacts and footprints for infrastructure for oil and gas development projects.

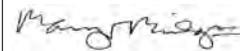
It is important to recognize that the administrative action proposed is a lease sale, which authorizes lessees to engage only in "ancillary activities" that do not harm the environment. Parties seeking to conduct ancillary activities are required to notify BOEMRE, and the proposed activities are reviewed for compliance with performance standards contained in federal regulation. Equally important is the point that lease sale is not an authorization to drill. Considerable additional environmental review, additional

public review opportunities and federal agency approvals are required before any exploration, development or production activities may occur.

Lessees seeking to engage in these activities must submit an exploration plan or a development and production plan, as appropriate, for BOEMRE review and approval, which involves preparation of an Environmental Assessment ("EA") and/or an EIS by BOEMRE. Importantly, in the SEIS, BOEMRE specifically puts lessees on notice that it intends to prepare an EIS for any development and production plan submitted for a lease issued from Lease Sale 193. As BOEMRE acknowledges in the SEIS, an EIS for development and production activities typically takes 2-3 years, which allows time for exhaustive environmental review and public process of those specific activities. Proposed plans are evaluated for compliance with applicable regulations, lease stipulations, and other requirements, including the adequacy of the oil spill response plan. Prior to conducting any drilling operations, the lessee must submit and obtain approval for an Application for Permit to Drill ("APD"). The rulemaking which followed the DWH event, as well as the new well as the new NTLs, augment and strengthen prior regulatory and administrative requirements for exploration plans, development and production plans, and permitting on the OCS, including the Chukchi Sea.

Accordingly, AIF urges the BOEMRE to move forward with the Lease Sale of 193 by finalizing the environmental review process. It is essential that manufacturers have access to reliable, secure and affordable energy while recovering from one of the worst recessions in our nation's history.

Sincerely,



Barney T. Bishop III
President & Chief Executive Officer

CC: Members of the Florida Congressional Delegation

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June 22, 2011



Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Eric J. Dompeling

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AND SAFETY SERVICES

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James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

June 2011

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea
Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

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With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Mark Hyien
Vice-President

The Bennett Consulting Group

At the Nexus of Business and Government

101 Constitution Ave. NW
Suite 525
Washington, DC 20001
202-292-4860

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of The Bennett Consulting Group, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Kenneth G. Lee
Managing Partner, The Bennett Consulting Group

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 06, 2011
 Status: Posted
 Posted: July 06, 2011
 Tracking No. 80eba333
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0019

Comment from Brian Benson, Air Liquide America L. P.

Submitter Information

Name: Brian Benson

Address:

PO Box 230874

Anchorage, AK, 99523

Email: brian.benson@airliquide.com

Phone: 907-273-9763

Organization: Air Liquide America L. P.

General Comment

I am writing to ask BOEM to reaffirm the leases sold in sale 193.

The development of offshore oil in the Chukchi Sea is critical to the continued health of the Alaskan economy, as well as the infrastructure required to support continued oil and gas exploration and production.

The product of the continued production is sorely needed in America today, and will provide employment to Alaskan's and others in the US in downstream petrochemical businesses.

To continue to deny access to the area is a defacto moratorium on energy production in the US, while giving lip-service to Americans in need of oil and gas. The producers have met every requirement that the federal government has asked, and continued delays are petty harassment.

The shareholders of the companies interested in working the leases need some return on their investment dollar, before they decide to quit Alaska. Loss of energy development here would mean economic disaster. On the other hand, substantial economic returns to the state and federal governments will be realized when production begins.

Thank you,
 Brian Benson



21 June 2011

James Kendall, Regional Director

Alaska OCS Region

Bureau of Ocean Energy Management, Regulation and Enforcement

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

Given these facts, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Operations Manager

Bering Straits Aerospace Services

4600 Deharr Rd Ste 200, Anchorage, AK 99508; Phone 907.334.8303

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REGIONAL DIRECTOR, ALASKA OCS
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 ANCHORAGE, ALASKA

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June 21, 2011

James Kendall, Regional Director

Alaska OCS Region

Bureau of Ocean Energy Management, Regulation and Enforcement

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

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Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Harry McDonald, President

CENTRAL CRUDE CORPORATION

2020 N. Bramblewood
 WICHITA, KANSAS 67208

June 16, 2011

James Kendall, Regional Director

Alaska OCS Region

Bureau of Ocean Energy Management, Regulation and Enforcement

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express support for Lease Sale 193 as well as my appreciation for what I understand has been a thorough review by the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE). We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed in a timely fashion.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Charles B. Wilson
 Vice President

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 JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
 MINERALS MANAGEMENT SERVICE
 ANCHORAGE, ALASKA



June 28, 2011

RECEIVED
JUL 7 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Mr. James Kendall
Regional Director
BOEMRE - Alaska OCS
3801 Centerpoint Drive, Ste. 500
Anchorage, AK 99503-5820

Re: Comments on the Revised Draft SEIS for Lease Sale 193

Dear Mr. Kendall:

The Chamber of Shipping of America is a trade association for U.S.-based companies that own, operate or charter ocean-going vessels. We were founded in 1917 and have engaged in representing our members relative to government actions since our founding. Our members operate all types of ships and vessels in the international and domestic trades of the U.S. including the important energy trade between Alaska and the rest of the nation. We very strongly urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193.

We recognize that Lease Sale 193 has undergone exhaustive environmental review and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea and transportation of the resulting energy products can and will be done safely and with greatest care for the marine and land environments. We ask that you proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits of increased domestic energy production.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country as equipment manufacturers and suppliers are engaged, and will generate significant government revenue. We understand there are an estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas in the lease area. This is a very large amount of potential energy and to not engage in development would be counter to our national interest particularly as there would be an estimated creation of an annual average of 54,700 jobs nationwide.

As our nation grows and develops, we will need more energy and we will probably continue importing energy from various parts of the world, from those both friendly to the U.S. and perhaps those who are not so friendly. It is in our best interest to develop our own capabilities to meet future demand wherever and whenever possible.

For the above reasons, we strongly support moving forward with Lease Sale 193. At the completion of the process, we respectfully request that the lease-holders be allowed to move forward with planned exploration and production.

Sincerely,

Joseph J. Cox
President

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Voice: 202.775.4399 ■ Fax: 202.659.3795
Website: www.knowships.org



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Anchorage, Alaska 99503
Phone: 907-278-6600 • Fax: 907-278-4401

June 21, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 in Alaska's Chukchi Sea. We believe BOEMRE's latest Revised SEIS addresses the concerns about oil spill potentials and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

According to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

CONAM CONSTRUCTION COMPANY

Robert W. Stinson
President

RWS:sl

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

ConocoPhillips Comment

Michael J. Faust
Manager, Chukchi Project Integration
ConocoPhillips Company
P. O. Box 100360
Anchorage, Alaska 99510-0360
phone 907 265 1470



July 11, 2011

VIA E-MAIL: www.regulations.gov Document ID - BOEM-2011-0044-0001

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Dr., Ste. 500
Anchorage, Alaska 99503

Re: Comments on Revised Draft Supplemental Environmental Impact Statement - Lease Sale 193

Dear Regional Director:

ConocoPhillips Company (COP) appreciates the opportunity to provide comments on the Revised Draft Supplemental Environmental Impact Statement (Revised DSEIS) for Lease Sale 193.

COP, including its subsidiaries and affiliates, is one of the largest owners of state and federal leases in Alaska, a major owner in the three largest oil fields on the Alaska North Slope, operator of both Kuparuk and Alpine oil fields and an operator in the Alaska Cook Inlet. Our company has decades of safe and environmentally responsible operating experience in Arctic conditions. We also bring decades of experience in preparing our permit applications and operational plans for activities in the Arctic.

COP sees great potential in the Chukchi Sea, as demonstrated by our investment of \$506MM on 98 Outer Continental Shelf (OCS) leases in 2008. As a successful bidder, we immediately began planning for an exploration program on leases near the previously drilled Klondike #1 location. During the summer of 2008, we conducted site clearance and shallow hazard surveys. We also initiated a voluntary multi-million dollar scientific data collection program in the Chukchi Sea, collaborating with other offshore operators, universities, research institutions and local stakeholders on a multi-year program collecting biological, oceanographic and air quality data in the lease area. This program has contributed to the existing scientific knowledge base of the Arctic OCS, and has been well received by North Slope communities and several environmental groups. These studies are being done to support our plans to drill an exploration well in the Chukchi Sea, which could be as soon as the summer of 2013. Since 1973, more than 5,000 independent studies have been conducted in the Alaska OCS by many different entities, at a total cost exceeding \$500 million. Alaska's North Slope and OCS are very likely the most studied energy basins in the United States. In just the past 10

ConocoPhillips Comment

Regional Director
BOEMRE
July 11, 2011
Page 2

years, over 250 scientific studies have been funded in the Arctic, with the majority focused in the Beaufort and Chukchi Seas.

The Revised DSEIS provides a substantially more robust environmental analysis of Lease Sale 193 in a thoughtful and comprehensive discussion, and includes new information on a wide variety of topics. The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has clearly and diligently taken "a hard look" at the issues remanded by the court and has thoroughly evaluated the possible environmental consequences of the proposed action and a reasonable range of alternatives. COP believes the agency has more than sufficiently addressed the issues identified by the court in its remand order, and concurs with the BOEMRE's decision to include the analysis of a hypothetical Very Large Oil Spill (VLOS) scenario.

The American Petroleum Institute (API) and the Alaska Oil and Gas Association (AOGA) are supplying detailed comments to this Revised DSEIS. COP supports and adopts the API/AOGA comments by reference, and additionally provides the following specific comments.

Comments

- Section 1.A - Background.** The agency explains on page 2 that there was a reorganization and the MMS was renamed the BOEMRE; however there are some locations in the document that use the name MMS. Where applicable, use of the agency's new name should be conformed.
- Section 1.D - Regulatory and Administrative Framework** (pages 5-7). COP suggests that BOEMRE update and correct references to the Alaska Coastal Zone Management Program (ACMP) as the ACMP statutory authorization recently expired and has not been renewed or extended by the state legislature.
- Section II.B - Alternatives** (pages 15-16). COP supports the alternatives carried forward in the Revised DSEIS and considered in the original Lease Sale 193 Final EIS. These alternatives adequately cover the possible scenarios for exploration drilling and development in the area. COP supports the existing Alternative IV as the alternative that provides appropriate mitigation measures to minimize environmental impacts and protect subsistence resources. COP would not support implementation of Alternative III, which would double the deferral corridor with very little added environmental protection.
- Section II.D - Summary of Environmental Impacts** (page 20). COP disagrees with the agency's assumption that larger deferral areas decrease environmental impacts. As discussed below, setting larger deferral areas does not necessarily equate to better environmental protection.

5. **Section II.D.1** (page 22). In the previous DSEIS, the agency stated that the impacts to fish resources were not expected to be significant, but in the Revised DSEIS, the agency states that the impacts are localized and minor. For clarity and consistency, the Revised DSEIS should include an explanation of why the text was changed and the intent of the changed wording.
6. **Section II.D.3** (pages 31-34). In the Threatened and Endangered Marine Mammals section, the statement is made that enlarging the deferral area would remove industrial activity from the spring-migration route of the bowhead whales. Increasing the deferral areas will not necessarily add protection to the migration pathways but will likely move development and infrastructure further offshore and distant from onshore resources. This increase in distance may increase risk and adverse impacts due to an increased use of marine vessels and aircraft. In this section, the agency should consider a more in depth discussion of the balancing of risks and impacts, such as the following: the low probability of an oil spill, the likelihood of adequate response mechanisms, and the certainty of increased emissions and risks to human life and marine mammals associated with increased air and marine traffic necessary for more distant development and infrastructure. The current deferral area, along with the current mitigation measures in the Sale 193 FEIS, provide ample protection to marine mammals and subsistence activities. Given the potential adverse impacts associated with moving facilities further offshore, it is not clear that Alternative III presents decreased environmental impacts, as the Revised DSEIS suggests.
7. **Section III.B.4** (pages 51-52). In the Cetaceans section, BOEMRE describes bowhead whale movements during the spring migration and then states that a sample of tagged bowhead whales "traveled through some portion of the Lease Sale 193 Area." For clarity, the description should better define the difference between the spring migration and the fall migration of the bowhead whale through the Chukchi Sea. It should also explain that subsistence activity for the bowhead whale does not occur more than 20 miles from the coast based on historical accounts. The majority of the bowhead harvest occurs during the spring migration when the whale follow ice leads to the north, parallel to the coast line.
8. **Section IV. D – The Very Large Oil Spill (VLOS)** (pages 121-136). The VLOS scenario evaluates an extremely unlikely, if not impossible, spill event, which the text acknowledges. The VLOS scenario description correctly states that it is a hypothetical event and the discharge numbers associated with it do not reflect any particular well, and that each operator will submit a worst-case discharge analysis based on the individual characteristics of their exploration well. The agency would be well served to explain how low the probability is that a VLOS could ever occur. BOEMRE should also be extremely clear that the Revised DSEIS, with respect to the VLOS, does not account for the beneficial impacts of cleanup, recovery and intervention efforts. These factors could have significant reduction on the estimated spill volume or spill duration. This distinction is

important since oil spill contingency and response planning is required before any approval would be granted for OCS exploration or development to move forward. BOEMRE provides an adequate explanation in the Revised DSEIS of how it derived each of the reservoir parameters, but does not describe or explain the basis for the tubing hydraulics correlation selected to be used in the calculation. If there is no well hydraulics correlation incorporated into the model, the flow is most certainly overstated and that fact should be clarified. The agency would be well served to also explore other well control intervention technologies that could be employed and might be more applicable and likely to be used in such a catastrophic situation in lieu of a relief well.

There have been a total of 30 wells drilled in the Beaufort Sea and 5 wells drilled in the Chukchi OCS over the past 30 years. OCS exploration and development are not new to the Arctic. The development of more advanced drilling technologies, along with the incorporation of effective mitigation measures, allows industry to conduct Arctic exploration and development operations in a manner that results in a smaller footprint with less environmental impacts. Technology advancements in seismic surveys allow the industry to better focus on subsurface targets and reduce the surface impacts even more. Finally, and importantly, there has never been an oil spill caused by a blowout from an offshore exploration and production drilling in state or federal waters off Alaska or the Canadian Arctic.

In summary, COP supports the Revised DSEIS and requests that the comments above be incorporated into the administrative record and considered to strengthen the analysis and discussion. COP also requests that the BOEMRE move swiftly to finalize the EIS and affirm the 193 Lease Sale.

If you have questions about these comments, please call me at (907) 265-1470 or Bruce St. Pierre at (907) 265-6417.

Sincerely,



Michael J. Faust
Manager,
Chukchi Project Integration

cc: R. Lunam, ConocoPhillips Company
G. Haddad, ConocoPhillips Company
D. Brown, ConocoPhillips Company
B. St. Pierre, ConocoPhillips Company



Consumer Energy Alliance Comment

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July 11, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS for Lease Sale 193

Dear Mr. Kendall:

On behalf of Consumer Energy Alliance (CEA), I appreciate the opportunity to submit the following comments to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) in support of the planned oil and gas development of Lease Sale 193 in the Chukchi Sea and the finalization of the environmental review process for this lease sale.

CEA is a non-profit, non-partisan organization committed to working with elected leaders, affected stakeholders and consumers to help create sound energy policy and maintain stable energy prices. We support improved domestic and global energy security and provide information on expanding the use of all energy resources, including oil, natural gas and alternative energy, as well as increasing energy efficiency. CEA has more than 160 affiliated organizations, including energy suppliers and producers, manufacturers, small businesses and community organizations, as well as a nationwide network of almost 300,000 consumer-advocates.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) thoroughly addresses the concerns raised during the last comment period on the SEIS and rightfully concludes that the probability of a very large oil spill in the region remains very low. While I appreciate the efforts the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) and the federal government have taken to ensure development in Lease Sale 193 can proceed safely, I urge the BOEMRE to finalize expeditiously this review process and permit development to move forward.

As the Revised Draft SEIS clearly argues, the likelihood of a very large oil spill occurring in the Chukchi Sea – or any other region – remains extremely low, particularly for levels of discharge experienced during the Gulf of Mexico spill in 2010. Since 1971, out of over 41,000 wells drilled in the U.S. Outer Continental Shelf, only one resulted in a spill of greater than 1,000 barrels: the Gulf of Mexico spill in 2010. Therefore, the historical incidence rate of a very large oil spill over the last forty years has been 0.0000239%. In Alaska, 84 wells have been drilled offshore since 1971, all without incident. Clearly, the risk remains extremely low that a blowout and large oil spill would occur if exploratory drilling is allowed to proceed in the Chukchi Sea.

Following the *Deepwater Horizon* tragedy in April 2010, the federal government and industry have properly augmented their oversight and preparedness capabilities to further minimize the risk of



Consumer Energy Alliance Comment

another oil spill. In particular, operators in the region have amassed an unprecedented level of onsite spill-response capabilities in the event a discharge does occur and have adopted additional, redundant measures to ensure blowout preventers operate properly and can be secured if they fail.

In assessing Lease Sale 193, we must also acknowledge the vast economic and energy security benefits that will come with its development. For the State of Alaska alone, development of Alaska's OCS has the potential to create over 35,000 jobs over the course of the next 50 years. These jobs will bring a total payroll of approximately \$72 billion, much of this revenue remaining in the state to support local industries and small businesses. Even though development occurs on northern coast of Alaska, tens of thousands of American workers will also benefit: from steel manufacturing in the Midwest to pipefitters in the Gulf Coast region to refiners on the West Coast, support industries from Coast to Coast rely on offshore development for demand for their goods and services.

In addition to boosting U.S. economic growth, Alaska OCS development has the capacity to prevent the Trans-Alaska Pipeline System (TAPS) from closing if production proceeds within the next decade. As illustrated by the January 2011 temporary closure, the TAPS has become increasingly susceptible to leaks, which is a direct result of idled oil and debris that build up with low throughput. Even when the pipeline closes for a short period, West Coast refineries that are dependent on Alaskan oil must import oil from overseas markets, driving up the price of oil and forcing millions of American consumers to rely on oil from Russia and other volatile producers. While many may argue that resources from the Beaufort and Chukchi Sea will not come online to save TAPS from closing permanently, continually delaying development of our offshore resources only increases the likelihood that TAPS will close in this generation. TAPS was once authorized and built at a time of great peril for our nation's energy security; its closure may force a return to an era of great uncertainty and energy insecurity.

I appreciate the opportunity to comment today, and I look forward to seeing the BOEMRE finalize the Revised Draft SEIS as soon as possible. If you have any questions about CEA or these comments, please contact Natalie Joubert at njoubert@consumerenergyalliance.org.

Very sincerely,



David Holt
President

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebf9c5
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0052

Comment from Robert Cox, Crowley Petroleum Distribution

Submitter Information**Name:** Robert Cox**Address:**4620 Silver Spring Circle
Anchorage, AK, 99507**Email:** bobicohome@gmail.com**Organization:** Crowley Petroleum Distribution**General Comment**

Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.

Rescinding the leases will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment. Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

Sale 193 is critical to Alaska's future economy and the nation's long-term energy security. The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.

The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.

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PUBLIC SUBMISSION

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 Received: July 08, 2011
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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0035

Comment from Steve Denton, Denton Civil and Mineral

Submitter Information**Name:** Steve Denton**Address:**PO Box 149
Healy, AK, 99743**Email:** dcandm@mtaonline.net**Organization:** Denton Civil and Mineral**General Comment**

I encourage the BOEM to expeditiously affirm OCS lease sale number 193.

The resources of the Chukchi Sea have been estimated at 29 billion barrels of oil and 209 tcf of gas. If 25% of that is recoverable it could supply 5% of the nation's oil demand (about the excess capacity in the Alaska pipeline) for 20 years and 10% of the nation's gas demand for 22 years. Absent a true fatal flaw in the proposed development, it is unconscionable that development of this resource should not proceed. The positive impact in jobs, tax revenue and general stimulus to local, State and US economies are benefits too significant to be squandered.

The BOEM has done a thorough job of assessing the potential environmental impacts to exploration and development in the Chukchi Sea. Mitigation measures in place, and agreed to by the lessees, provide a high level of protection of the environment and the local use of wildlife resources. Oil development in Alaska's Arctic, both onshore and offshore, has a stellar record of environmental stewardship and safety. 30 wells have already been drilled in the Chukchi Sea using far less refined technology than will be employed today, and there have been no significant incidents. Because of the relatively shallow depth of water, exploration can be done using techniques that are tried and proven. Exploration in the Chukchi Sea will be more of a

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Denton Civil and Mineral Comment

demonstration of improved conventional and proven drilling techniques than it will be an exercise in development of new techniques.

We have the technology, experience and will to allow responsible development of the Chukchi Sea oil and gas resources without having to sacrifice our natural wonders, as Alaskans have done in many other resource development venues. Please confirm lease sale 193 and allow the United States to benefit from the great treasure in the Arctic once again, as it did from oil development on Alaska's North Slope.



June 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Brandon Perle
 Controller
 Dynamic Industries, Inc.



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 2804 Peters Road • Harney, LA 70558 • Ph. 504-362-3171 • Fax 504-362-0366

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PUBLIC SUBMISSION

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0126
 Comment from Catkin Kilcher Burton, Eagles' Enterprises

Submitter Information

Name: Catkin Kilcher Burton
Address:
 1143 M Court
 Anchorage, AK, 99501
Email: c2burton@pci.net
Phone: 9076446202
Organization: Eagles' Enterprises

General Comment

see attached files for signed letter and additional comments*

Dear Mr. Kendall:

On behalf of Eagles' Enterprises, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Thank you for the opportunity to comment.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,
 Catkin Kilcher Burton
 President/Co-Founder

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Eagles' Enterprise, LLC

Attachments

BOEM 001

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11 July 2011

Comments on the Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 c/o Regional Director James Kendall
 BOEMRE - Alaska OCS
 3801 Centerpoint Drive Ste. 500
 Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Eagles' Enterprises, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Thank you for the opportunity to comment. Lease Sale 193 has already undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Catkin Kilcher Burton
 Catkin Kilcher Burton
 President/Co-Founder



July 5, 2011

Comments on the Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 c/o Regional Director James Kendall
 BOEMRE - Alaska OCS
 3801 Centerpoint Drive Ste. 500
 Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of EnergyNorthAmerica, LLC, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and non-commercial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth



and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,



Partner, EnergyNorthAmerica, LLC

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebf9d7
 Comments Due: July 11, 2011
 Submission Type: Web

PUBLIC SUBMISSION

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0053

Comment from Catherine Gardner, ENSTAR Natural Gas Co.

Submitter Information

Name: Catherine Gardner

Address:

23005 Whispering Birch Dr.

Chugiak, AK, 99567

Email: gardnersinak@gmail.com

Phone: 907-688-8806

Organization: ENSTAR Natural Gas Co.

General Comment

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea

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is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

As of: July 25, 2011
 Received: June 07, 2011
 Status: Posted
 Posted: June 08, 2011
 Tracking No. 80e3e3aa
 Comments Due: July 11, 2011
 Submission Type: Web

PUBLIC SUBMISSION

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0002

Comment from Jack Phelps, organization

Submitter Information

Name: Jack Phelps

Address:

P.O. Box 3426

Palmer, AK, 99645

Email: jack.phelps68@gmail.com

Organization: ExecuSwift Consulting

General Comment

Exploration and development of oil and gas reserves in the Chukchi Sea is vitally important to the economic welfare of the United States and Alaska in particular. There is no reason to believe that oil development in the OCS off Alaska's northwest coast cannot be done in a safe manner without harm to the environment or other activities in the area, such as whaling. Adequate safeguards are available and will be implemented by Shell Oil Company and other operators in the area. The government should act expeditiously to release and approve the EIS and other required permitting documents so that exploration can move forward as soon as possible.



July 6, 2011

James Kendall, Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Outer Continental Lease Sale 193 Supplemental Environmental Impact Statement (SEIS)

Greetings:

The Bureau of Ocean Energy Management, Regulation and Enforcement has done an excellent job in the Supplemental Environmental Impact Statement (SEIS) through addressing all the issues raised in the legal challenge to the Draft Environmental Impact Statement for OCS Sale 193.

Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.

The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.

Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

INVESTORS

DIAMOND
BP Exploration
ConocoPhillips
ExxonMobil
Fairbanks Daily News-Miner
FMH & Denali Center
Finn Hills Resources Alaska

PLATINUM
Alyaska Pipeline Service Co.
Carlson Center
Doyon, Limited
Fred Meyer Stores
Golden Heart Utilities
Mt. McKinley Bank
Wells Fargo Bank Alaska

GOLD
Birchwood Homes
Denali State Bank
Design Alaska
Doyon Utilities LLC
First National Bank Alaska
GCI
Kinross-Fort Knox Mine
MAC Federal Credit Union
Northrim Bank
Sumitomo Metal Mining Pogo LLC
The Boeing Co.
Usibeli Coal Mine

SILVER
ACS
Alaska Airlines
Alaska Railroad
Alaska USA
AT&T
Denali - The Alaska Gas Pipeline
Events Air Cargo, Events Air AK
Exclusive Paying/Univ. Red-Mix
Fairbanks Natural Gas
Flowline Alaska
Fountainhead Development
General Teamsters Local 959
GVEA
Hale & Associates, Inc.
JL Properties, Inc.
Key Bank
Personnel Plus
Spirit of Alaska FCU
Tanana Valley Clinic
TDL Staffing
The Boeing Co.
TOTE
WAL-MART Stores, Inc.
Yukon Tile Company

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water.

Thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.

Independent third parties have estimated that an annual average of 54,700 new jobs shall be created and sustained over 50 years by OCS-related development in Alaska. An estimated \$63 billion in payroll shall be paid to employees in Alaska as a result of OCS development.

Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.

Sincerely,

The Greater Fairbanks Chamber of Commerce

Richard Heieren
Board of Directors, Chair

Lisa Herbert
Executive Director

Fairbanks Pipeline Training Center Comment

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
Status: Posted
Posted: July 11, 2011
Tracking No. 80ebf2e
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0100
Comment from James Sampson, Fairbanks Pipeline Training Center

Submitter Information

Name: James Sampson
Address: P.O Box 74313, Fairbanks, AK, 99707
Email: fptc@alaska.net
Phone: 907-455-1234
Fax: 907-455-1235
Organization: Fairbanks Pipeline Training Center

General Comment

I am writing in support of responsible development of the area encompassed by Lease Sale 193. After reviewing the Revised Draft SEIS it is clear that the additional analyses of the three specific areas of concern, combined with the prior analyses and conclusions put forth in the 193 Final EIS, provides an accurate depiction of real and hypothetical considerations.

Safe and responsible development requires diligent regulatory oversight. Your agency is charged with this task. After the unfortunate Gulf of Mexico blow-out and subsequent oil spill, BOEMRE was created and mandated to require a regulatory regime which would be an effective means to ensure that development would continue while at the same time ecosystems and socio-economic/cultural systems would be protected.

As the Director of the Fairbanks Pipeline Training Center, I am particularly concerned that Alaska's First Indigenous People affected by development be provided employment opportunities

Fairbanks Pipeline Training Center Comment

to help mitigate disruptions to their rural subsistence socio-economic culture. In order to effectively take advantage of employment opportunities, Alaska's First People of the Arctic must be trained to acquire the needed technical and safety skill sets.

In closing, let me reiterate that I support safe and responsible development of the 193 Area.

FCC - FAA Licensing, LLC
FCC - FAA Licensing, LLC 703-615-6615 (p)
"DC Based with a Global Reach" Elizabeth@FCC-FAALicensing.com

June 30, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of FCC-FAA Licensing, LLC, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 27,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$70 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at great risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will decrease our energy dependence and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

200 North Union Street, Suite 100, Alexandria, Virginia 22314

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Regards,
Elizabeth Buckley
Elizabeth Buckley
President

200 North Union Street, Suite 100, Alexandria, Virginia 22314

First National Bank Alaska Comment



RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

June 21, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing on behalf of First National Bank Alaska, a national banking association, with its main office in Anchorage, Alaska to express our support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected



First National Bank Alaska Comment

by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

David A. Lawer
Senior Vice President & General Counsel



June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RECEIVED
JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Mark V. Johnson
Business Development Manager
GCI Industrial Telecom
907.868.5478

Anchorage / Prudhoe Bay / Houston - 907-868-0400 - 1-877-411-1484 - www.GCI-IndustrialTelecom.com



Evan J Griffith Enterprises
P.O. Box 93322
Anchorage, Alaska 99509
1 June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my firm support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. This latest Revised Draft Supplemental Environmental Impact Statement (SEIS) pointedly addresses the concerns raised about the potential for a very large oil spill and concludes that the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Without argument, the United States is overly reliant on foreign imports of a commodity that is crucial to our nation's economic health. Thus, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, I believe the BOEMRE must move quickly to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Evan J Griffith, Principal

RECEIVED
JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

RECEIVED
JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Ilamaki LLC, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplement Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,



Industrial Energy Consumers of America
The Voice of the Industrial Energy Consumers

1155 15th Street, NW, Suite 500 • Washington, D.C. 20005 202-223-1420

Mr. James Kendall
Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Re: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall:

On behalf of The Industrial Energy Consumers of America (IECA) we welcome the opportunity to make comment on the Department of Interior's revised Draft Supplemental Environmental Impact Statement for the Outer Continental Shelf, Alaska OCS Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193. IECA supports the BOEMRE to move forward with the Lease Sale 193 by finalizing the environmental impact review process.

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$800 billion in annual sales and with more than 750,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies through advocacy and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of industries including: plastics, cement, paper, food processing, brick, chemicals, fertilizer, insulation, steel, glass, industrial gases, pharmaceutical, aluminum and brewing.

Especially important is the well documented fact that the Trans-Alaska Pipeline System that delivers oil production to the West Coast has experienced a throughput reduction from 2.1 million barrels per day to only 650,000 barrels per day. Increased Alaska production is needed to fill this vital pipeline.

It is vitally important that the US produce more oil and natural gas domestically because it increases energy security and creates good paying jobs. Increased production also supports lower energy prices that are needed by our manufacturing sector to compete globally, create jobs and exports. We strongly encourage Lease Sale 193 to proceed.

Sincerely,

Paul Cicio
President

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Daryl Sobek
General Manager

INSULFOAM
A **Chemical** Company

Insulfoam LLC
529 Hudson Drive
Anchorage, AK 99501
(907) 279-0407
Fax: (907) 270-9911



INTERSTATE
Oil & Gas
COMPACT COMMISSION

P.O. Box 31127 Oklahoma City, Oklahoma 73152-0127
PHONE: 202-512-5141 Oklahoma City, Oklahoma 73105
PHONE: 105-533-1550 Fax: 405-525-0592 Web: www.iogcc.org

Alabama June 20, 2011

Alaska James Kendall, Regional Director
Alaska OCS Region
Arizona Bureau of Ocean Energy Management, Regulation and Enforcement
Arkansas 3801 Centerpoint Drive, Suite 500
California Anchorage, Alaska 99503

Colorado RE: IOGCC Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall,

The Interstate Oil and Gas Compact Commission supports enhanced domestic energy production in general and an environmentally safe but robust OCS and on-shore leasing programs. It is my understanding that the OCS Lease Sale 193, in particular, has received a thorough review by the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE). Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes; and that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up to 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecasted to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in mind, it is imperative that BOEMRE allow America to develop its abundant energy resources, including those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable areas of the world, despite the vast North American resources available.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. As a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Carl Michael Smith
Executive Director
Interstate Oil and Gas Compact Commission

Utah CMS/b

Virginia

West Virginia

Wyoming

COLLECTIVELY REPRESENTING THE STATES

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

**Iowa
Motor
Truck
Association**

July 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of the Iowa Motor Truck Association, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

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JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

717 E. Court Avenue
Des Moines, Iowa 50309
Tel: 515-281-5193
Fax: 515-281-2201
e-mail: imta@iowamotortruck.com
www.iowamotortruck.com

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Brenda Neville, CAE
President & CEO
Iowa Motor Truck Association



IRIS ACCOUNTING

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Sabrina Conrad

Office: (907) 746-1554

Cell: (907) 529-4405

Email: sconrad@irisaccounting.com

IRIS ACCOUNTING

4685 E Finger Lake South View Drive, Wasilla, AK 99564

RECEIVED

JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

July 9, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplement Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Joseph



Prudential
Jack White/Vista Real Es
3801 Centerpoint Drive, Suite
Anchorage, AK 99503
Cell (907) 527-5553
Fax (907) 562-6485
jerryne@prudential.com

Louisiana Trade Consultants, LLC. Comment

LOUISIANA TRADE CONSULTANTS, LLC

ADVISORS TO SMALL AND MEDIUM SIZE ENTERPRISES

July 8, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

RE: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Louisiana Trade Consultants, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplement Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Louisiana Trade Consultants, LLC. Comment

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Paris J. Theriot

Paris J. Theriot
President

POST OFFICE BOX 67
GONZALES, LA 70707
PHONE: 225.936.5105
EMAIL: PFMARKETS@AOL.COM



Lynden Incorporated
8801 South Aurora Place, Suite #1
Anchorage, AK 99503
(907) 249-1584
Fax: (907) 249-1544

June 29, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Comments on Revised Draft SEIS
Lease Sale 193 Chukchi Sea

Lynden is a multi-modal transportation and logistics company, with over 700 Alaska employees, a history of scheduled service to Alaska starting in 1954, and extensive activity throughout the state of Alaska, including support for all segments of the economy. Lynden has provided support services for the oil industry including significant logistics support for ICS and emergency response on virtually every incident in Alaska. In addition to providing transportation and logistics services, one of our companies provides training to industry and government responders at our facility in Fairbanks.

Our assessment is that Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.

Furthermore, we believe the potential for industry investment and the economic benefit to Alaska is vital. Shell, in particular, has made unprecedented provisions for proceeding with safe, environmentally responsible development in the OCS.

Additional points that support affirming Lease sale 193.

- ✓ Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- ✓ Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- ✓ The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- ✓ The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- ✓ Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating

- restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- ✓ Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- ✓ Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- ✓ Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- ✓ The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- ✓ An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.
- ✓ New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance. \$82 billion in payroll would be paid to employees in the Lower 48.
- ✓ Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion.
- ✓ Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- ✓ Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

Our company has commented and/or testified on every scenario that continues to arise on development of resources within Federal leases. We are standing by with employees, vessels (which are included in the plan), aircraft, trucks, hovercraft, and all manner of logistics capabilities to assist Shell, we are simply waiting for the green-light from the Federal agencies to proceed and put our personnel and assets to work.

Sincerely,

LYNDEN LOGISTICS

Janine St. John
Janine St. John
Vice President

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
Status: Posted
Posted: July 11, 2011
Tracking No. 80ebfd3
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0113
Comment from Erin Double, Lynden International

Submitter Information

Name: Erin Double
Address:
6441 S Airpark Place
Anchorage, AK, 99502
Email: double@lynden.com
Organization: Lynden International
Government Agency Type: Federal
Government Agency: BOEM

General Comment

"I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska's Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage only in "ancillary activities" that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state's OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. Alaska's North Slope region has already produced 16 billion barrels of oil in the last years, so the OCS really could fuel Alaska's economy and provided much needed energy for the nation for decades.

Again, please adopt the SEIS and reaffirm Lease Sale 193."



259 South Alaska Street
Palmer AK 99645
(907) 745-3398
www.mapmakersalaska.com

June 21, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,
s/ Brit Lively, Owner
Mapmakers Alaska



19411 Indian Hawthorn Drive, Houston, TX 77094
Telephone: (907) 350-6247 Email: hillary.mcintosh@gmail.com

June 2, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, We urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Hillary McIntosh
Hillary McIntosh
President

July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Evan J. Griffith



P.O. Box 2929, Palmer AK 99645

2 June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Dear Mr. Kendall:

I am writing to express Matanuska Electric's support for Lease Sale 193 as well as to indicate appreciation for the thorough review the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has undertaken. This latest Revised Draft Supplemental Environmental Impact Statement (SEIS) pointedly addresses the concerns raised about the potential for a large oil spill and concludes that the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources.

Clearly, the United States is overly reliant on foreign imports of the oil that is crucial to our nation's economic health; hence, it is imperative that BOEMRE permit development of our abundant energy resources, especially those in Alaska's Outer Continental Shelf (OCS). Continuing to import oil from unstable and adversarial countries despite the vast North American resources available makes no sense whatsoever. Relying on oil from countries like Saudi Arabia, Libya and Venezuela places the United States at risk for disruptions in supply and price spikes and supports repressive and anti-American regimes.

In conclusion, I believe the BOEMRE must move quickly to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Evan J Griffith, General Manager



PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebedc
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0045

Comment from Benjamin Mohr, Anchorage Young Republicans

Submitter Information

Name: Benjamin Mohr
Address:

1001 West Fireweed Lane
 Anchorage, AK, 99503

Email: anchorageyr@gmail.com

Organization: Anchorage Young Republicans

General Comment

We are writing collectively to support OCS drilling in the Chukchi Sea, specifically in the area of Lease Sale 193. We encourage BOEMRE to move forward with responsible development of the Chukchi Sea.

The federal government has a tremendous opportunity at hand in terms of economic revitalization, strengthening national security, and job creation for everyday Americans. Today's economic outlook is bleak, with many state government and our federal government creeping further into debt, it's time for these entities to partner with the private sector in order to generate public revenue and begin the process of freeing ourselves from the financial chains that hold us back from success. Resource development is one of the major solutions to the problems before our country.

Supporting Alaska supports our entire country, and this issue is proof that we are a key component to building a better America. Oil and gas development in Alaska is one of the steps our country can take the assure national and energy security.

Sincerely,

Benjamin Mohr
 Chair, Anchorage Young Republicans



June 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

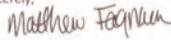
I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. As a small business owner the importing of foreign oil concerns me, because it takes away from the American economy and affects the number of jobs for Americans. Alaska has known oil reserves in the OCS and on other federal lands in Alaska, these oil reserves when allowed to produce not only create jobs, it also generates significant income for the federal treasury in royalties and lease sale. It is the duty of the United States government to not allow this valuable resource to become stranded and create an environment that allows for production of the Alaskan OCS.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Iraq, Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,


 Matthew Fagnani

3501 Denali Street, Suite 202, Anchorage, Alaska 99503 • T. 907.569.7070 • F. 907.569.7090 www.msialaska.com

file:///C:/Documents and Settings/BENEDETD/Local Settings/Temp/wzb432/Document Li... 7/26/2011

National Association of Manufacturers Comment

Paul A. Yost
 Vice President
 Energy and Resources Policy

July 11, 2011

National Association of Manufacturers Comment

revenue. Currently, it is estimated that there are 27 billion barrels of oil and 132 trillion cubic feet of natural gas in Alaska's OCS. This resource is imperative for our nation's long-term energy supply. More importantly, the Trans-Alaska Pipeline System (TAPS), which delivers 14% of domestic oil production to refineries on the West Coast, has seen a decrease in throughput from 2.1 million barrels per day to 650,000 barrels a day. TAPS will need additional oil development in order to remain operational. Exploration and development in Alaska's OCS can help extend the operating life of this critical infrastructure.

Furthermore, offshore drilling is a tremendous source for jobs. It is estimated that exploration and development activities in the Alaskan OCS can create a total of 68,600 jobs, during production and 91,500 at peak employment across the country. Also, exploration and development can generate some \$199 billion in government revenue in the next 50 years. The safe exploration and development of Alaska's OCS is vital for manufacturing, energy security, job creation and the overall economy.

Accordingly, the NAM urges the BOEMRE to move forward with the Lease Sale of 193 by finalizing the environmental review process. It is essential that manufacturers have access to reliable, secure and affordable energy while recovering from one of the worst recessions in our nation's history.

Sincerely,


 Paul A. Yost
 Vice President
 Energy and Resources Policy

James Kendall
 Regional Director
 BOEMRE – Alaska OCS
 3801 Centerpoint Drive
 Suite 500
 Anchorage, AK 99503-5820

Dear Mr. Kendall:

The National Association of Manufacturers (NAM) welcomes the opportunity to provide comments to the Department of Interior's revised Draft Supplemental Environmental Impact Statement, announced by Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) on May 20, 2011. We respectfully submit the following comments in support for oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS).

By way of background, the NAM is the largest manufacturing association in the U.S., representing nearly 13,000 small, medium and large manufacturers in all 50 states. We are the leading voice in Washington, D.C. for the manufacturing economy, which provides millions of high-wage jobs in the U.S. and generates more than \$1.6 trillion in GDP. In addition, two-thirds of our members are small businesses, which serve as the engine for job growth.

Our mission is to enhance the competitiveness of manufacturers and improve American living standards by shaping a legislative and regulatory environment conducive to U.S. economic growth. While the Manufacturers support environmental regulations designed to protect the environment and public health, we consistently oppose regulations that create adverse economic impacts on manufacturing without providing any real environmental or public protection. Therefore, we ask that the BOEMRE allow access to the Chukchi Sea by finalizing the environmental review process for lease sale 193 in a timely manner and without excessive delays.

Manufacturers use one-third of the nation's energy. As such, a reliable, secure and affordable source of energy is vital. At a time when gas prices are at an all-time high, the nation needs to safely and effectively develop its own energy resources. Despite the vast domestic sources of energy, the U.S. continues to rely on foreign countries for energy. As a result, the U.S. is put at a greater risk for disruption in supplies, leading to price spikes. By exploring and developing our own domestic resources, we will have access to safe, reliable and affordable sources of energy for manufacturers in the U.S.

Moreover, offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government



NATIONAL TANK TRUCK CARRIERS, INC.

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Tel: 703-838-1960 • Fax: 703-838-8860
www.tanktruck.org

June 24, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820



Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of National Tank Truck Carriers (www.tanktruck.org) , I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193.

I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply.

Serving as the Industry's Voice for over 60 years

NTTC-2

Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy - not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

John L. Conley
John L. Conley
President
National Tank Truck Carriers, Inc.



2010 South Houston Pkwy, Suite 1000 Houston, TX 77058 (281) 447-8800
Tom.williams@nautilus-int.com http://nautilus-int.com

June 23, 2011

Mr. James Kendall
Regional Director
BOEMRE - Alaska OCS
3801 Centerpoint Drive
Suite 500
Anchorage, AK 99503-5820



Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I am the President and Managing Director of Nautilus International LLC., an offshore energy technology service company. My company focuses on riser technologies which provide safe and low environmental impact alternatives to conventional exploration and well intervention.

I am expressing the same position as the majority of the American public, who want to increase domestic oil and gas production in a safe and environmentally responsible manner. There is widespread support for the development on Alaska's Outer Continental Shelf today, and are perplexed that the federal government continues to delay the finalization of the environmental review for Lease Sale 193 which would allow access to the Chukchi Sea.

I would like to express my strong support for oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193.

Alaska's OCS is critical to our country's long-term energy supply. I have seen reliable statistics that estimate the economic activity from the development of the Chukchi and Beaufort Seas to create an annual average of 54,700 jobs nationwide.



The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

I have been involved in the energy business in the US, internationally and in Alaska for over 30 years, including experience as project manager for the first Department of Energy funded gas hydrate exploration program in Alaska. I am convinced (and the majority of the public is convinced) that the Chukchi and Beaufort Seas will be developed in a safe and environmentally responsible manner.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Thomas E. Williams
Thomas E. Williams
President and Managing Director, Nautilus International LLC.

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebf0e
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 Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0078

Comment from Matthew Hanson, New York Life

Submitter Information

Name: Matthew Hanson

Address:

645 G Street, Suite 100-779
 Anchorage, AK, 99501

Email: mjhanson@ft.newyorklife.com

Organization: New York Life

Government Agency Type: Federal

Government Agency: BOEM

General Comment

I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska's Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage only in "ancillary activities" that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state's OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. Alaska's North Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really could fuel Alaska's economy and provided much needed energy for the nation for decades.

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PUBLIC SUBMISSION

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 Tracking No. 80ebf826
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0049

Comment from Tanja Davis, NMS Staffing

Submitter Information

Name: Tanja Davis

Address:

5547 Penn Circle, A
 Anchorage, AK, 99504

Email: honig@cox.net

Phone: 907-717-5270

Organization: NMS Staffing

General Comment

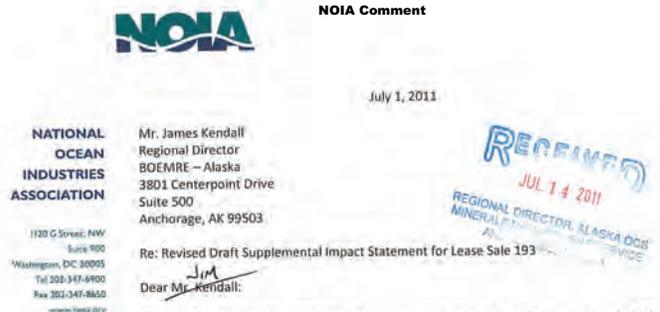
- Over 81% of Alaskans consistently support OCS activities.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- Demand for energy is continuing to rise and will require continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has an obligation to develop domestic energy sources, both onshore and offshore.

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NMS Staffing Comment

• The Very Large Oil Spill Analysis is hypothetical and so extremely unlikely as to be irrelevant. From 1971 to 2009, 41,514 wells were drilled on the OCS with 50 well control incidents (0.1%) resulting in spillage, of 1,829 barrels (0.0000115% of the volume produced). Learnings from the BP Deepwater Horizon blowout in 2010 have been documented and numerous new prevention measures have been implemented as a result. Having learned how to prevent the one-in-40-thousand tragedy, we should not sacrifice the enormous benefits of domestic energy production on the altar of fear.

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NOIA Comment


The image shows a letter from the National Ocean Industries Association (NOIA) to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). The letter is dated July 1, 2011, and is addressed to Mr. James Kendall, Regional Director of BOEMRE - Alaska. The letter discusses the Draft Supplemental Environmental Impact Statement for Lease Sale 193 and expresses support for the oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS). The letter also mentions that the NOIA represents companies engaged in domestic offshore energy production, including exploration, production, equipment manufacture, service and supply, transportation and other related offshore support sectors. The letter concludes by stating that the NOIA supports the leasing process initiated with Lease Sale 193 and that the environmental review process and complete leasing process should be expedited.

NATIONAL OCEAN INDUSTRIES ASSOCIATION
 1120 G Street, NW
 Suite 100
 Washington, DC 20005
 Tel 202-347-6900
 Fax 202-347-8650
 www.noia.org

Mr. James Kendall
 Regional Director
 BOEMRE – Alaska
 3801 Centerpoint Drive
 Suite 500
 Anchorage, AK 99503

July 1, 2011

RECEIVED
 JUL 14 2011
 REGIONAL DIRECTOR, ALASKA OCS
 MINERAL FIELD DEVELOPMENT SERVICE

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of the member companies of the National Ocean Industries Association (NOIA), I am writing to express strong support for oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and complete the leasing process initiated with Lease Sale 193.

The National Ocean Industries Association (NOIA) represents companies engaged in all aspects of domestic offshore energy production, including exploration -- both majors and independents -- production, equipment manufacture, service and supply, transportation and other related offshore support sectors. Either directly or indirectly, our member companies are all working to explore for and produce energy resources from the nation's Outer Continental Shelf (OCS) in a safe and environmentally sensitive manner. Accordingly, Lease Sale 193 and the future prospects for production in the federal waters off Alaska's coasts are of great interest to us.

Lease Sale 193 has undergone exhaustive environmental review and the potential environmental impacts have been subjected to extensive and thorough analysis. The Draft Supplemental Environmental Impact Statement (SEIS) sufficiently analyzes the existing information and has determined that any missing or unavailable information was not essential for a well-reasoned choice among the alternatives. The SEIS sufficiently identifies and considers the potential of a very large oil spill and the potential gas development that might occur as a result of Sale 193. In addition, the SEIS identifies and analyzes the potential effects on the other natural resources in the region and the economy.

Oil and gas development can and should be done safely and BOEMRE should proceed with the sale results of Lease Sale 193 so the American people can fully realize the energy security and economic benefits resulting from increased domestic energy production.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue from royalties, rents and bonus bids. Conservative estimates put Alaska's OCS reserves at an estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas. Alaska's offshore is clearly critical to our nation's domestic energy portfolio.

NOIA Comment

Additionally, economic activity from the development of the Chukchi and Beaufort Seas could create an annual average of 55,000 jobs nationwide and generate nearly \$50 billion for the treasury over the next fifty years. The benefits of moving forward with Lease Sale 193 – and with broader Alaska OCS development – are abundantly clear.

NOIA strongly encourages BOEMRE to move forward now to complete this environmental review and complete the leasing procedures of Lease Sale 193 as soon as possible.

Sincerely,



Michael Kearns
Director, External Affairs

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
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Tracking No. 80ec011c
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Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0124

Comment from Joseph Beedle, Northrim Bank

Submitter Information

Name: Joseph Beedle

Address:

1985 Brandilyn Street
Anchorage, AK, 99516

Email: beedle@gci.net

Phone: 907-250-3202

Organization: Northrim Bank

General Comment

James Kendall, Regional Director Alaska OCS Region Bureau of Ocean Energy Management, Regulation and Enforcement 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99503 RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

I wish to encourage affirmative action to accept the Revised Draft SEIS. As a near life-long Alaskan working and living in all regions of the State (including 6 years as president/CEO of a large ANCSA Corporation, 6 years as the CFO/VP Finance for the University of Alaska System and 25 years in finance/banking positions, and having experienced visitation to remote regions offshore and outside of the North Slope, ANWR and Point Barrow - I wish to communicate my personal and professional confidence in the ability of this Stage of the Sale/Lease to perform in complete compliance with the plan. As I reviewed the 180 pages of Analysis of Incomplete or Missing Information as included in Appendix A of the SEIS I was overwhelmed with the efforts to get distracted with the appeal process - absent evidence of constructive intent. I am convinced that this Draft SEIS sets an extremely high standard for compliance and that these significant companies are committed to absolute compliance and should be permitted to pursue their exploratory process. Future phases can and will undoubtedly experience additional oversight, but please proceed to approve this phase for the benefit of all concerned. The Plan, science, controls, oversight, commitment and liability combine to make this project fully supportable by any rational, reasonable and prudent authority.

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North Star Terminal & Stevedore Co. LLC Comment

 OWNERS AND OPERATORS OF ANDERSON TERMINAL 	NORTH STAR TERMINAL & STEVEDORE CO. LLC NORTH STAR EQUIPMENT SERVICES <i>Contracting Stevedores Terminal Operators Materials Handling Equipment Services</i>	
	790 Ocean Dock Rd, ANCHORAGE, AK. 99501 www.northstarak.com	TEL: (907) 272-7537 FAX: (907) 272-8927
Valdez Homer Seward Dutch Harbor	 JUL 11 2011 REGIONAL DIRECTOR, ALASKA OCS MINERAL MANAGEMENT SERVICE ANCHORAGE, ALASKA	

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

July 6, 2011

Subject: Comments on the Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 Chukchi Sea OCS

To Whom It May Concern:

On behalf of North Star Terminal & Stevedore Co and North Star Equipment Services I would like to express our support for the approval of this draft SEIS for lease sale 193 for offshore drilling on Alaska's outer continental shelf because:

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 208 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the

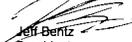
North Star Terminal & Stevedore Co. LLC Comment

geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.

- Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance. \$82 billion in payroll would be paid to employees in the Lower 48.
- Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

In conclusion, to obstruct/prevent/deny the OCS lease sales would be detrimental to the people of Alaska, to the local/state economies and to the national need to be energy independent.

Respectfully Submitted,



Jeff Bentz
President

Federal Rulemaking Portal: Go to <http://www.regulations.gov>



NORTH STAR TERMINAL & STEVEDORE CO. LLC
NORTH STAR EQUIPMENT SERVICES
Contracting Stevedores Terminal Operators Materials Handling Equipment Services

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Valdez Homer Seward Dutch Harbor

REGIONAL DIRECTOR, ALASKA OCS
 MINERALS MANAGEMENT SERVICE
 ANCHORAGE, ALASKA

RECEIVED
 JUL 7 2011

Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

June 28, 2011

Subject: Comments on the Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 Chukchi Sea OCS

To Whom It May Concern:

On behalf of North Star Terminal & Stevedore Co and North Star Equipment Services I would like to express our support for the approval of this draft SEIS for lease sale 193 for offshore drilling on Alaska's outer continental shelf because:

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the

geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.

- Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance. \$82 billion in payroll would be paid to employees in the Lower 48.
- Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

In conclusion, to obstruct/prevent/deny the OCS lease sales would be detrimental to the people of Alaska, to the local/state economies and to the national need to be energy independent.

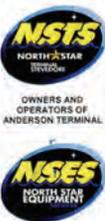
Respectfully Submitted,



Steve Post
 Vice President, North Star Terminal & Stevedore Co., LLC

Federal Rulemaking Portal: Go to <http://www.regulations.gov>

North Star Terminal & Stevedore Co., LLC Comment



NORTH STAR TERMINAL & STEVEDORE CO. LLC
NORTH STAR EQUIPMENT SERVICES
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Valdez Homer Seward Dutch Harbor

REGIONAL DIRECTOR, ALASKA OCS
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RECEIVED
 JUL 11 2011

Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

July 6, 2011

Subject: Comments on the Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 Chukchi Sea OCS

To Whom It May Concern:

On behalf of North Star Terminal & Stevedore Co and North Star Equipment Services I would like to express our support for the approval of this draft SEIS for lease sale 193 for offshore drilling on Alaska's outer continental shelf because:

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- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
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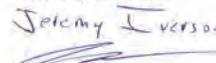
North Star Terminal & Stevedore Co., LLC Comment

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- Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance. \$82 billion in payroll would be paid to employees in the Lower 48.
- Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

In conclusion, to obstruct/prevent/deny the OCS lease sales would be detrimental to the people of Alaska, to the local/state economies and to the national need to be energy independent.

Respectfully Submitted,



Federal Rulemaking Portal: Go to <http://www.regulations.gov>



NORTHWEST TECHNICAL SERVICES

June 21, 2011

Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review undertaken by the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE). We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns posed regarding the potential for a very large oil spill and that it rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes even during a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from 2010. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health and security.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only puts the United States at risk for disruptions in supply and price spikes, it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Mary E. Shields

Mary E. Shields
General Manager

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E-Mail: ak@nwtstech.com - Website: www.NWTS-ak.com



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA
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(423) 332-2240 / FAX (423) 332-2066

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Sandra B. Parker



511 West 41st Avenue, Suite 101
Anchorage, Alaska 99503

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REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

July 7, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Dr., Suite 500
Anchorage, AK 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Director,

I am in full support of affirming Lease Sale 193 as held in 2008. I was present at that sale and witnessed first hand the bid openings for the offshore tracts. I was at first surprised at the amount of money that was offered for some of the blocks, then I realized that the companies that were offering the most were also the companies that knew the potential of the area and were willing to make the investment to explore and develop for a much needed domestic oil and gas supply. It is absolutely shocking to me that the same government that would offer the tracts for lease would also deny the companies the ability to explore their potential at a time when our economy is teetering on recovery (or collapse) and America's dependence on foreign oil continues to increase.

Alaska and the U.S. have had the highest environmental and safety standards in the world, before BOEMRE added more regulations.

More than two dozen wells have been drilled in the Beaufort Sea, and five in the Chukchi Sea without incident, and that was back in the 1980's. In fact most Alaskan's didn't even know there was drilling activity going on at that time. Not to mention the dated drilling technology that was used compared to today's modern and safer practices.

In summary, I would ask that you add my comments to the "Affirm Lease Sale 193" side, and for your agency to encourage, rather than condemn, responsible resource development in Alaska and elsewhere in the United States.

Sincerely,

Judy Patrick

Judy Patrick
Owner
Judy Patrick Photography



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

June 22, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. The latest revised draft of the Supplemental Environmental Impact Statement (SEIS) thoughtfully addressed concerns raised about the potential for a very large oil spill and rightfully concluded the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when

global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

PEAK OILFIELD SERVICE COMPANY

Patrick M. Walsh, PE
Senior Vice President

July 11, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy -- not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,



PILE CO INC.
JIM BRYDSON
PRESIDENT

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June 22, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

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In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,
PRICE GREGORY INTERNATIONAL, INC.

David L. Matthews
Vice President and Alaska Area Manager

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

PURVIS OPERATING CO.

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June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

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Sincerely,

D. Briggs Donaldson, CPL, CPLTA, CDOA
Land Manager

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA



10550 Shivaak Circle
Anchorage, AK 99507



June 21, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

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In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Lowell Humphrey
President

Resource Development Council Comment



2011-2012 Executive Committee
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Phil Cochran, Sr. Vice President
L.F. "Lee" Host, Vice President
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Congressman Don Young
Governor Sean Parnell

July 8, 2011

Mr. James Kendall, Regional Director
Bureau of Ocean Energy Management, Regulation, and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

The Resource Development Council (RDC) is writing to urge the Bureau of Ocean Energy Management to affirm Lease Sale 193 as held in 2008. The Supplemental Environmental Impact Statement (SEIS) provides sufficient information and analysis to support a decision affirming the sale.

OCS oil and gas development is absolutely critical to Alaska's future economy. With the Trans-Alaska Pipeline System now running at one-third capacity, exploration blocked in ANWR, and non-development activists working toward Wilderness designations in the National Petroleum Reserve, nothing less than Alaska's future economy is at stake.

The responsible development of potentially immense oil and gas deposits in the Chukchi Sea would significantly boost the economy and extend the life of the oil pipeline. Without new federal oil production, TAPS could be uneconomic to operate at some point in the next decade.

If there is no oil and gas development in ANWR and the OCS, and the best prospects in NPR-A are taken off the table, the federal government must then accept the consequences, including heavier reliance on foreign oil, soaring trade deficits, a weaker national economy, and compromised national security. For Alaskans, our future will be bleak with the state losing much of its economic base.

Not developing federal oil in Alaska makes no sense from an economic and energy security standpoint, especially given the fact that America imports over 50 percent of its oil, and at a great cost.

With its enormous potential reserves, the OCS can sustain Alaska's economy for generations. The public interest should compel the Obama

Resource Development Council Comment

administration to move forward with policy that encourages job creation, supports national energy security while growing the economy, and providing the nation with much needed domestic energy supplies.

RDC has a high level of confidence that exploration and development can occur safely in the Arctic and that mitigation measures can be put in place to address most concerns. Development can and does occur without harm to polar bears, caribou and other species.

Since the 2010 oil spill in the Gulf of Mexico, opponents of offshore drilling are calling for an indefinite ban on new exploration and development in Alaska. RDC sharply disagrees. Operating conditions in these waters are categorically different than those in the deep waters of the Gulf of Mexico and pose much lower risk. Moreover, the processes and safeguards in place today in Alaska should allow leasing and exploration activity to resume in the Alaska OCS.

Drilling in the Arctic offers distinct difference than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska, where wells would be in very shallow water. In addition, the relatively shallow water depth in the Chukchi Sea would allow blowout preventers to close much more rapidly than those in deep water. The blowout preventers would also be directly accessible to dive teams, unlike the Gulf where any maintenance or repairs had to be accomplished by remote control vehicles. Another distinction is that many Alaskan offshore operations are seasonal in nature. For example, Shell has proposed conducting its exploratory drilling during the summer and fall open water season. Ice management vessels will be positioned on site to deflect any ice flows that could potentially approach a rig. There are also major differences between state and federal oversight and regulatory frameworks, as well as fundamental differences in the geology of the regions. All of these contrasts warrant special consideration in public policy decisions and should lead the BOEMRE to conclude that exploration should move forward in the area covered by Lease Sale 193.

Advances in technology provide an additional measure of confidence in Alaska drilling. Energy development in Alaska is subject to in-depth analysis by federal law, a stringent permitting process, and oversight by state and federal agencies. In every instance, development is preceded by extensive studies.

RDC recognizes that subsistence whaling is vitally important, both economically and culturally to North Slope villages. Industry and government working together have the ability to protect subsistence resources while producing needed domestic energy for the nation. Strong regulatory oversight, combined with other mitigation measures, can be employed to protect all resource and subsistence users.

While the Chukchi and Beaufort Seas are considered frontier areas, exploration activity has occurred there before. In fact, thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. Moreover, there has never been a blowout in the Alaska or the Canadian Arctic that has resulted in an oil spill.

Opponents of oil exploration have cited the lack of infrastructure in the Arctic as a reason not

Resource Development Council Comment

to drill in the region. However, it is important to note that additional infrastructure will be built to accommodate future needs once exploration and development activities move forward. The lack of infrastructure today is due directly to the fact that there has been virtually no ongoing development or commercial activity of any kind offshore in the Arctic.

The SEIS concludes that the probability of a very large oil spill is very minimal and Shell has defended its ability to quickly cap blowouts and to contain and clean up spilled oil. Shell has committed to stage extensive resources onsite to immediately respond to any incident. The company has also committed to building and staging in the region a pre-fabricated dome to place over a troubled well. Moreover, virtually all functions of Shell's operations will be monitored at remote sites off the rig, giving industry and government critical "real-time" data and allowing for early detection of potential problems. In addition, the Alaska Clean Seas consortium has substantial resources and experience in the Arctic and has done extensive mapping to identify sensitive areas. The consortium has also conducted extensive safety and oil spill drills in the Arctic and has active research programs dating back into the early 1980s.

Some groups opposing offshore development will insist that all scientific and research data gaps be eliminated before exploration is even considered. In our view, this is unreasonable. A significant scientific record exists in the Arctic and industry and others are well positioned to add to it with new studies, while exploration moves forward in a cautious and responsible manner. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than \$500 million on studies in Alaska and in the past decade the agency has funded hundreds of studies here, with the majority of those focused on the Beaufort and Chukchi Seas. Rather than wait for all the questions to be answered, drilling should proceed as research continues to advance our knowledge of the Arctic.

Those who oppose exploration in the Arctic would study this issue indefinitely and use any data gaps as an excuse for inaction. There will always be gaps and unanswered questions, no matter where exploration and development occur. In fact, significant gaps existed before and during development of the North Slope's most prolific oil fields. Despite these gaps, development moved forward in a responsible manner while at the same time our knowledge and understanding of the Arctic advanced. But not all questions and concerns regarding oil and gas exploration and development can be answered and met. Not all risks can be eliminated. If we wait until we have all the answers, drilling will never occur. That may be the goal of some, but that ignores the nation's need for domestic sources of oil. If the federal government insists that every risk be eliminated, then it must be prepared to significantly increase foreign imports to meet future needs. It must then also accept the consequences of a heavier reliance on foreign oil, including higher trade deficits, a weaker and more vulnerable economy, and compromised national security. Put another way, failure to move forward with OCS development in Alaska will put the state economy at risk, as well as the nation's security.

Between ANWR, NPR-A and the Alaska OCS, there could be nearly 40 billion barrels of oil in place. By comparison, 16 billion barrels of oil have been produced on state lands across the North Slope in 33 years. The sustainability of TAPS and Alaska's economy will largely depend on some combination of oil production from these federal areas, which represent the nation's best onshore and offshore prospects for major discoveries.

Resource Development Council Comment

New production in the Alaska OCS would reduce America's reliance on foreign energy. The Alaska OCS is an important future source of U.S. energy supply with up to 29 billion barrels and over 235 trillion cubic feet of natural gas potentially in place. The potential recoverable reserves offshore Alaska is more than all the current total proven U.S. oil reserves of approximately 21 billion barrels. Alaska could have the ninth largest oil resources in the world ahead of Nigeria and Libya - if access is granted to these potential reserves. Moreover, OCS gas reserves would significantly improve the long-term economic viability of the proposed gas pipeline from the North Slope to the Lower 48 - a clean energy priority of the Obama administration. To become a reality, the pipeline requires additional gas reserves beyond what has already been discovered onshore.

Given its potential for immense recoverable reserves and enormous economic benefits to the state and nation, the Alaska OCS should be opened to responsible development. OCS development would generate hundreds of billions of dollars in royalty and tax revenues to the state and federal governments and aid the nation's economic recovery by reducing the trade deficit and creating tens of thousands of new jobs. Indeed, OCS leases off Alaska's coast have already generated billions of dollars to the federal treasury.

The OCS can sustain Alaska's economy for generations. Currently there are more than 108,000 Alaskan jobs tied to the discovery, production and shipment of Alaskan oil and natural gas, accounting for more than 15 percent of Alaska's population. According to a University of Alaska study, OCS production could provide an annual average of 54,700 jobs nationwide with an estimated cumulative payroll of \$145 billion over the next 50 years. Moreover, revenues generated from OCS development in the Arctic could amount to \$193 billion in revenues to federal, state and local governments over a 50-year period.

RDC and many Alaskans share President Obama's view that America needs to conserve more and put new emphasis on renewable and alternative energy. By doing so, the nation can ultimately break its reliance on foreign oil. Yet while America must conserve more and move toward renewable energy, it still needs to pursue new domestic oil and gas production, given the fact it will take decades before renewable energy becomes a dominant energy source. Even with the Obama administration's goal to decrease dependence on oil, it is projected that fossil fuels will still account for two-thirds of this nation's energy consumption in 2025. Meanwhile, every barrel of oil that is not produced in the U.S. will be imported from abroad to meet our needs. Given economic, environmental and geopolitical concerns, America must produce more of the oil it consumes - under American laws, regulations and oversight, and by American workers.

It is vital that our nation's abundant energy resources be fully utilized for compelling economic and energy security reasons. RDC encourages BOEMRE to re-affirm Lease Sale 193 as held in 2008. Thank you for the opportunity to provide comments.

Sincerely,


Carl Portman
Deputy Director

Shell Exploration & Production Company Comment

July 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of H & M enterprises, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

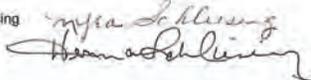
Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy - not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Herman & Myra Schliesing





July 11, 2011

Dr. James Kendall
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5823

Re: Comments on Revised Draft Supplemental Environmental Impact Statement, Lease Sale 193 Chukchi Sea

Dear Dr. Kendall,

As a successful bidder in Oil and Gas Lease Sale 193, Shell Gulf of Mexico Inc. ("Shell") is pleased to have the opportunity to comment on the Bureau of Ocean Energy Management, Regulation, and Enforcement's ("BOEMRE's") Chukchi Sea Planning Area Oil and Gas Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement (May 2011) ("Revised Draft SEIS"). These comments supplement the comments Shell submitted on November 29, 2010, on the original Draft Supplemental Environmental Impact Statement ("Draft SEIS") BOEMRE released for public comment on October 15, 2010. For convenience, those comments are attached.

BOEMRE originally undertook this environmental review in response to remand instructions issued by the U.S. District Court for the District of Alaska. The court instructed BOEMRE to supplement its review of Lease Sale 193 under the National Environmental Policy Act ("NEPA") by analyzing three issues: (i) the environmental impact of natural gas development; (ii) whether missing information identified in the Final Environmental Impact Statement for Oil and Gas Lease Sale 193 and Seismic-Surveying Activities in the Chukchi Sea ("193 FEIS") was essential or relevant under 40 C.F.R. § 1502.22; and (iii) whether the cost of obtaining the missing information was exorbitant, or the means of doing so was unknown. Following the completion of the public comment period for the Draft SEIS, BOEMRE decided to undertake an additional review of the impacts of a Very Large Oil Spill ("VLOS"). BOEMRE has now released the Revised Draft SEIS including the results of the VLOS analysis as well as additional information relating to the issues originally comprised the remand analysis.

These comments first address the BOEMRE's VLOS analysis and then address the additional information added to the Revised Draft SEIS on the original remand issues.

I. Very Large Oil Spill Analysis

BOEMRE has provided a thorough and detailed VLOS analysis in the Revised Draft SEIS. To better present the information for informed decision-making, Shell advises that BOEMRE make two general changes to the document.

First, BOEMRE should use more explicit language to clarify what it is analyzing in the VLOS, and what is excluded from the analysis. As discussed in the comments below, BOEMRE's inclusion of spill response and intervention efforts throughout the VLOS analysis is confusing. While Shell acknowledges BOEMRE's intention to ensure proper analyses of impacts from a very large oil spill in the Chukchi Sea, it is also important for the public to understand that the analysis presented in the Revised Draft SEIS does not take into consideration an operator's ability to respond immediately to an emergency that results from a well control situation while operating in the Chukchi Sea. For example, Shell's Exploration Plans since 2009 have identified and provided specific information on all response vessels that would accompany a drilling operation in the Chukchi Sea. Shell's response time to a well control scenario is one hour from the time of such event and is documented in all Chukchi Sea exploration planning. Shell notes that BOEMRE has provided a description of Shell's plans in the VLOS analysis (Revised Draft SEIS Section IV.D.3c). To avoid creating confusion, Shell urges BOEMRE to use all appropriate language to distinguish the impacts analyzed in the VLOS analysis, which disregard response efforts, from the discussion of the efficacy of response efforts, including the description of Shell's spill response plans (which are, of course, designed for Shell's EP and not for the extreme VLOS scenario constructed by BOEMRE for a different prospect).

Second, and also discussed in the comments below, Shell suggests that BOEMRE make a greater effort to contextualize the risk of a VLOS to minimize the possibility that the public and decision-makers overweigh the risk of this low probability event. Shell commends BOEMRE on the detailed analysis of the potential impacts of a VLOS contained in Section IV.E. of the Revised Draft SEIS. However, Shell is concerned that Section IV.D. does not adequately put the risk of those impacts in appropriate context. BOEMRE has not provided a quantitative probability assessment of the likelihood of a VLOS occurring in the text of the Revised Draft SEIS. This analysis appears to be included in Appendix B, but that information is not cross-referenced, summarized, or otherwise provided to readers of the Revised Draft SEIS in the appropriate sections. This omission leaves the public without a meaningful way to evaluate the likelihood of the impacts described in Section IV.E.

A. Probability Analysis

Section IV.D. provides background on the VLOS analysis, describes the method by which BOEMRE constructed the specific VLOS scenario analyzed, and discusses the efficacy of intervention, cleanup, and spill response techniques. This section should be revised to include a probabilities analysis. Although the Revised Draft SEIS states that a VLOS is a "low-probability, high impacts event," (see, e.g., Revised Draft SEIS at 121) the Revised Draft SEIS does not include an analysis of the quantitative probability of such an event or a cross-reference to Appendix B, which appears to provide that analysis. Multiple parts of Section IV.D. should be revised to put the risks analyzed in the appropriate context.

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Section IV.D.1. Background. Section IV.D.1. provides updated information on Outer Continental Shelf ("OCS") well control incident rates including information from 2010. However, the section does not take the necessary next step of putting that information in context to inform the reader on the likelihood of a well control event that leads to a release of liquid hydrocarbons occurring as a result of the Lease Sale 193 in light of the data provided. This omission could be partially resolved by cross-referencing or summarizing the data and conclusions in Appendix B. Appendix B appears to conclude that when the OCS well control data from 1971-2010 are considered, the fault tree analysis used in the Sale 193 FEIS remains valid. Revised Draft SEIS, Appendix B at B4. The fault tree analysis used in the Sale 193 FEIS estimates the frequency of a VLOS in the Chukchi Sea at 3.9×10^{-6} per well. *Id.* This is highly relevant information that should be made easily available to the reader to put the data on spill impacts provided in the text in the appropriate context. To completely resolve the potentially confusing description of the probability of a VLOS, Shell suggests that BOEMRE inform the public that this modeled rate overestimates the probability of a VLOS based on historical data (according to Section IV.D.1., the actual empirical rate of OCS incidents that have resulted in spills greater than 150,000 bbls is 1 in 41,781, which puts the unadjusted frequency of a VLOS at 2.39×10^{-5} per well; this actual empirical rate should be made available to the reader). Finally, Shell advises a careful review of terminology used to describe "OCS well control incidents." Because only approximately 20% of OCS well control incidents result in the release of any liquid hydrocarbons, the more relevant number for public review is the number of actual spills. Shell suggests that BOEMRE revise the text to clarify the distinction and properly focus on the risk of spills.

Further, the discussion later in Section IV.D.1. regarding rule changes following the Deepwater Horizon event provides only summaries of the regulatory changes, without any discussion on the anticipated safety impacts of those changes and consequent decreases in the probability of a VLOS. This omission should be rectified to provide the public with the most accurate prediction of the likelihood of a VLOS in the post-Deepwater Horizon regulatory environment.

B. Construction of the VLOS Scenario

The method by which BOEMRE constructed the hypothetical VLOS scenario analyzed in the Revised Draft SEIS is of critical importance. To properly evaluate the impacts discussion in Section IV.E., the reader must understand the likelihood of the actual event being analyzed. To do that, BOEMRE must provide a clear, plain language description of its methodology. While Shell generally approves of the descriptive language used in Section IV.D.2., there are some key concepts that should be further clarified.

Introductory Section. The three introductory paragraphs in this section make critical points regarding the use of the VLOS scenario, which, in some cases, should be strengthened with a quantitative reference to the low probability of a VLOS.

First, the text clarifies that the VLOS scenario is a planning tool to evaluate hypothetical events and should not be "confused with what would be expected to occur as a result of any of the action alternatives." Revised Draft SEIS at 126. Shell strongly agrees with this position and believes that BOEMRE could make the purpose of the VLOS more clear by providing the public with a cross-reference to the quantitative assessment of the likelihood of a VLOS in Appendix B, to further define what BOEMRE means by "hypothetical."

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Second, the text explains the similarities and differences between a VLOS and a worst-case discharge analysis ("WCD") for an Exploration Plan. Shell supports the inclusion of this critical distinction in the text to provide clarity to readers.

Third, the text states that the "VLOS scenario is predicated on an unlikely event—a loss of well control during exploration drilling that leads to a blowout and a resulting VLOS." Revised Draft SEIS at 126. What is lacking from this paragraph (and the description of OCS well control incidents it cross-references) is a description of how unlikely such an event would be. Shell urges BOEMRE to include (i) a cross-reference to the quantitative analysis of the overall probability of a VLOS based on the historic OCS well control data provided in Appendix B, and (ii) a qualitative assessment of the probability of the actual VLOS scenario modeled and analyzed in the Revised Draft SEIS, taking into account the extreme assumptions BOEMRE used to construct the scenario. The qualitative assessment of the probability of the actual VLOS scenario modeled is important because, although BOEMRE provides a description of the assumptions used to construct the scenario, the text does not convey to the reader the realistic impact of those assumptions — i.e., that BOEMRE has attempted to create an absolute worst case scenario so unlikely as to be extremely unlikely under real world conditions. Shell acknowledges that, because well control events are rare, providing a precise prediction of probabilities is challenging. However, without any attempt to put this risk in context, BOEMRE will fail in its responsibility to adequately inform the public of the realistic risks posed by the lease sale, thus, potentially causing the public and BOEMRE decision-makers to overweigh the risks of this low-probability event.

Rate, Time and Composition of Hypothetical Spill. This section is one of the most critical of the Revised Draft SEIS because it describes that construction of the actual VLOS scenario analyzed, thus describing the fundamental assumptions underlying the entire VLOS analysis. The VLOS scenario is described as "a hypothetical oil discharge model that estimates the highest possible uncontrolled flow rate that could occur from any known prospect in the Sale 193 area, given real world constraints." Revised Draft SEIS at 126. There are three assumptions described in this description, all of which should be explained in plain language for the reader: (i) uncontrolled flow rate, (ii) any known prospect, and (iii) real world constraints.

The confusion stemming from BOEMRE's inconsistent use of an uncontrolled flow rate, while also evaluating the negative impacts of intervention and response is addressed in the next section.

The use of the term "known prospect" is particularly problematic because it misleadingly implies that the subsurface characteristics of the geographical formation that BOEMRE used in the VLOS analysis are "known." In fact, as BOEMRE acknowledges in Appendix D (but not in the text of the Revised Draft SEIS), "[t]he particular prospect is not known to contain oil or to offer rocks capable of performing as petroleum reservoirs." Revised Draft SEIS, Appendix D, at D1-D2. Shell suggests that BOEMRE clarify in the text of the Revised Draft SEIS why it chose the geological formation used to create the VLOS and the limits of the analysis (i.e., if the formation does not contain oil, there is no risk of a VLOS from this prospect). Further, BOEMRE's use of the phrase "any known prospect" could lead the casual reader to infer that any prospect in the Lease Sale 193 area has the potential for a VLOS of the type modeled. Shell suggests that BOEMRE revise the language to clarify that the VLOS scenario was constructed to be the worst possible spill in the Lease Sale 193 area and that other known and mapped prospects do not have the physical capacity to flow at the rate analyzed.

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Finally, Shell suggests that BOEMRE define what it means by "real world constraints." As discussed in the following section, BOEMRE used many assumptions that are inconsistent with a "real world" response to a spill. BOEMRE should clarify that it does not include intervention and response in the phrase "real world constraints" and should describe what is included and what is excluded in the concept.

C. Impact of Intervention and Response

Shell agrees with BOEMRE's decision to discuss both recovery and cleanup methods (Revised Draft SEIS at 134-136) as well as intervention and response efforts (Revised Draft SEIS at 138-140). Shell believes that these efforts will significantly limit the impact of a spill in the unlikely event that a well control incident should occur. However, the current organization of the text is ambiguous in its treatment of these efforts.

As a preliminary matter, Shell strongly urges BOEMRE to explain to the reader why it has constructed a VLOS analysis that completely discounts the positive and mitigation effects of such efforts. Because intervention and response plans are required for any OCS well approval, Shell should explain to the public why it has constructed a scenario that assumes intervention and response will have, at best, no effect.

Regardless of BOEMRE's reasons for discounting the beneficial impacts of intervention and response, the current draft is confusing in its description of the impacts of these efforts. The Revised Draft SEIS states that recovery and clean-up efforts are "not factored into the spill volume posted by this scenario and considered during [Oil Spill Risk Analysis] modeling." (Revised Draft SEIS at 136) and that intervention and response efforts "are not factored into the estimated spill duration as described in the VLOS scenario" (Revised Draft SEIS at 139). Nevertheless, Section IV.E. includes the impacts of both recovery and cleanup as well as intervention efforts as Phase 4 of the VLOS event (Spill Response and Cleanup). Revised Draft SEIS at 137-38. Thus, the impacts of response and cleanup activities on the various resources are analyzed in Section IV.E., but the beneficial impact of those activities in decreasing the volume of oil reaching the environment and shortening the duration of an uncontrolled flow, is not.

Shell is not opposed to this approach, particularly given BOEMRE's position that it is using the VLOS scenario as a planning tool to identify the impacts of a spill based on the "highest flow rate of hydrocarbons and the aggregate discharge that could plausibly occur from any known prospect in the Sale 193 lease area." Revised Draft SEIS, Appendix D, at D1. Nevertheless, as it currently reads, the Revised Draft SEIS fails to adequately emphasize that Section IV.E., is analyzing both the adverse impacts of the uncontrolled flow volume modeled in the VLOS scenario, without reference to any benefits from response or intervention efforts, and the adverse impacts of response and intervention efforts. Specifically, Shell is concerned that the Revised Draft SEIS allows the incorrect impression that the adverse impacts of the VLOS identified in Section IV.E. are impacts that would be possible even with successful cleanup, response, and intervention efforts. Shell suggests the section titled "Scenario Phases and Impact-Producing Factors" (Revised Draft SEIS at 137-38) be revised to clarify this potential source of confusion. Shell further suggests that BOEMRE consider adding similar clarifying language as appropriate throughout Section IV.E.

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D. Context of the Effects Analysis

Section IV.E. provides an excellent and thorough discussion of the potential impacts resulting from the VLOS scenario BOEMRE constructed. As BOEMRE acknowledges, these impacts are highly unlikely. To put the 145-page analysis in proper perspective, Shell suggests providing further clarification in the introductory section in two ways.

First, Shell recommends providing, at a minimum, a cross reference to the probabilities analysis in Appendix B to provide the reader adequate context on the likelihood that the various adverse impacts described in the section could actually occur as a result of the lease sale. As it currently reads, the text merely states that the section "presents a detailed analysis of the environmental impacts that could occur in the event of the hypothetical VLOS scenario described in the preceding section." Without any reference to the extreme assumptions BOEMRE used to construct the VLOS scenario, a reader does not have the appropriate context to understand how unlikely such an event would be.

Second, Shell suggests providing a narrative description of the VLOS scenario. In various parts of the Revised Draft SEIS, BOEMRE refers to the VLOS scenario as "low probability, high impacts" (Revised Draft SEIS at 121), "a hypothetical oil discharge model that estimates the highest possible uncontrolled flow rate that could occur from any known prospect in the proposed Sale 193 area, given real world constraints" (Revised Draft SEIS at 126), and a "simulation [that] ascertains the highest flow rate of hydrocarbons and the aggregate discharge that could plausibly occur from any known prospect in the Sale 193 lease area" (Revised Draft SEIS, Appendix D at D1). Elsewhere, the text also states that the VLOS scenario does not include the beneficial impacts of cleanup, recovery, and intervention efforts. Revised Draft SEIS at 136, 139.

If the reader has the patience to search through the document and is able to assemble all of this disparate information, then improbability of the hypothetical VLOS scenario analyzed in Section IV.E. becomes clearer. Critically, within Section IV.E. itself, when any reference is made to the likelihood of VLOS, the scenario is merely described as "hypothetical." See, e.g., Revised Draft SEIS at 140, 143, but see 149 (making no reference to likelihood of VLOS). Nowhere in the document is the hypothetical clearly and succinctly defined as being an extreme, entirely speculative scenario; a scenario that the objective data establishes would be an exceedingly remote occurrence. A concise explanation of the basis for the hypothetical should be included to avoid confusion about the likelihood of the impacts described in Section IV.E.

Shell suggests that BOEMRE state in the introductory paragraphs of Section IV.E. and throughout the section as appropriate that the VLOS scenario was intentionally designed to model the maximum plausible uncontrolled and unmitigated flow from the prospect in the lease sale area with the greatest hypothetical potential flow rate, acknowledging that the particular prospect is not known to contain oil or to offer rocks capable of performing as petroleum reservoirs. Further, throughout Section IV.E., Shell suggests that discussions of Phase 4 acknowledge that the impacts of spill response, cleanup, and intervention efforts are being examined solely to identify adverse impacts, and that the mitigating value of those efforts in reducing the time or volume of the spill has not been considered.

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II. Original Remand Issues

A. Inconsistencies with Draft SEIS

BOEMRE updated and revised the discussion of the original remand issues in this Revised Draft SEIS. In doing so, BOEMRE has created some potential inconsistencies between the Draft SEIS and the Revised Draft SEIS. Shell suggests that BOEMRE consider providing additional explanation in the text for the following apparent inconsistencies:

- **Generally:** In Section III of the Draft SEIS, BOEMRE stated for a variety of resources that "analysts reviewed additional information for natural gas production and development" and that with respect to the given resource, "the information would not change the analysis or alter the environmental consequences." Shell commented that, in light of the Court's remand instructions, it would be desirable to identify the new information referenced by these statements. In the Revised Draft SEIS, BOEMRE has identified that information for certain resources, but for other resources, BOEMRE now states that no new information regarding the resources has been introduced in the supplement. See Revised Draft SEIS at 41 (physiography), 46 (water quality, air quality, and the acoustic environment), 68 (terrestrial mammals), 69 (wetlands), 72 (sociocultural systems), and 73 (archeological resources and environmental justice). Shell is concerned that the discrepancy between the language used in the Draft SEIS and the Revised Draft SEIS creates the appearance that information was reviewed for the Draft SEIS that was disregarded in preparation of the Revised Draft SEIS. Shell suggests revising the language to clarify BOEMRE's review process.
- **Page 22:** BOEMRE previously concluded that the impacts of natural gas development on fish resources was not expected to be significant, but in this document states merely that they are expected to be localized and minor.
- **Page 23:** BOEMRE previously stated that significant impacts to polar bears would "only occur during the unlikely event of a large oil spill," but in this document, BOEMRE states that "[s]ignificant impacts to polar bears could occur during a large oil spill, depending on the location of the spill."
- **Page 45:** BOEMRE previously described water quality in the Alaska Arctic region OCS as "relatively pristine," but in this document BOEMRE states only that the U.S. Chukchi Sea experiences little nonpoint source pollution due to runoff.
- **Page 103:** BOEMRE previously stated that an estimate of 25 spectacled eider takes and 2 Steller's eider takes as a result of 20 years of natural gas development "likely overstates the risk of collisions," but in this document, BOEMRE merely provides the estimates without comment on whether the estimates overstate the risk.
- **Page 114:** BOEMRE previously discussed the impacts of helicopter traffic, as opposed to fixed-wing aircraft on female/juvenile walrus, as well as the impact of ship activities on the same, but in this document that analysis is not included.

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B. Shell comments on the Draft SEIS not addressed in the Revised Draft SEIS

- In Section IV.C.2, discussing the air quality impacts of natural gas exploration and production, the Draft SEIS does not specify why it forecasts emissions and impacts for some pollutants (VOCs, ozone, greenhouse gases and visibility), but not others. Specifically, the basis for the comment "any increase in the concentrations of criteria pollutants from these activities would be small, local, and temporary" is unclear. Shell suggests BOEMRE clarify the scope of the air analysis performed for the natural gas development and production scenario and provide a basis for the conclusion that increases in pollutants due to natural gas development and production are likely to be small, local, and temporary. Further BOEMRE should identify the applicable air quality standards against which it measured the anticipated air quality impacts and provide the basis for its determination of the applicable air quality standard. *The air quality analysis is unchanged in the Revised Draft SEIS.*
- Shell commends BOEMRE on the explanation of its approach to missing information in the natural gas section provided on page A4 of Appendix A. To provide the reader with a full understanding of BOEMRE's approach to missing or incomplete information, Shell suggests that BOEMRE provide a similar explanation of its approach to missing or incomplete information in the VLOS section as appropriate.

III. Conclusion

The various environmental documents that support BOEMRE's decision to proceed with Lease Sale 193 (those completed prior to the decision to lease as well as those prepared in response to the court's remand) are thoughtful, detailed, carefully developed analyses that fully satisfy the requirements of the OCSLA, NEPA and the court's order on remand. Those documents reflect a significant investment of agency resources; an investment that holds tremendous promise for advancing the Nation's future energy security.

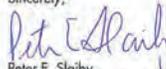
Like BOEMRE, Shell has invested heavily in Lease Sale 193. In addition to establishing its substantial leasehold position, Shell has now twice prepared comprehensive Exploration Plans, Environmental Impact Assessments and multiple supporting permit applications/environmental analyses for exploration drilling programs on several of those leases. Together with BOEMRE, it successfully defended the first of those plans against ENGO challenge at the Ninth Circuit, and success in any challenge to the second is anticipated. Shell also has purchased, modified and/or constructed multiple vessels that are designed and built for the specific environmental conditions that will be encountered during the proposed exploration drilling program. Shell has also assembled a team of experts in the multiple, relevant technical and environmental disciplines that will enable it to complete its proposed program in a safe, environmentally responsible manner. In addition, Shell's exploration program, which is only possible as a result of the agency's hard work in reaching the decision to lease, will create hundreds of new jobs for Americans.

We encourage the agency to finalize this SEIS, ratify its earlier decision to lease and promptly complete its review of Shell's most recent proposed Chukchi Sea Exploration Plan. Shell is prepared to move forward with its exploration drilling program starting in the summer of 2012. However, any

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further delays likely will mean the loss of another drilling season and the jobs that would be created by the program.

Sincerely,



Peter E. Slabey
Vice President, Shell Alaska

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July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,



Sodexo Remote Sites – North America
On-site Service Solutions.

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Sodexo Remote Sites Partnership
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South-Central Timber Development, Inc.

6 July 2011

Lease Sale 193 Chukchi Sea
Regional Director, Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Re: SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Director:

Lease Sale 193 should be allowed to proceed at once. The U.S. economy is feeble; the budget deficit and the national debt are alarmingly serious. This great country is strapped down and rendered as helpless as Gulliver among the Lilliputians because of so many cautionary regulations, so many incentives to buy our petroleum abroad, and so many disincentives to produce domestic petroleum. If the capital and labor involved in the production and shipping of foreign oil were instead invested in the American oil business, a hefty start will have been made towards righting our country.

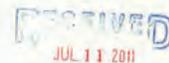
You may be tempted to recoil from any duty to invigorate the American economy on the grounds that your work is confined by the statutes concerned, that you do not serve on the President's Council of Economic Advisors. However, if any citizen serving in government would have a care to make our economy grow at a brisk rate – say four to five percent per annum – our debt and deficit problems would disappear and our citizens would be enlivened in "the pursuit of happiness."

I ask you to rise to your nation's needs, and do all possible to make Lease Sale 193 a monumental and early success.

Thank you, and good luck!

Sincerely yours,

Joseph R. Henri



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Sodexo Remote Sites

Kelly Patrick
Vice President of Operations

Chukchi Lease Sale Letter

page 2

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TELEPHONE: (907) 279-1493
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SOUTHGATE RESOURCES, LLC
2211 NORFOLK ST., STE 616
HOUSTON, TX 77098

July 5, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820



Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

On behalf of Southgate Resources, LLC, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy—not less. The United States continues to import oil from unstable and distant countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

President, Southgate Resources, LLC



July 11, 2011

SUBMITTED ELECTRONICALLY

Regional Director James Kendall
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Re: **Comments of Statoil USA E&P Inc. on the Revised Draft SEIS for Lease Sale 193 Chukchi Sea**

Dear Director Kendall:

Statoil USA E&P Inc. (Statoil) appreciates the opportunity to submit comments on the Revised Draft SEIS for Lease Sale 193 in the Chukchi Sea. We believe that the opportunity for input and active engagement with stakeholders and the public is necessary to ensure a balanced and environmentally responsible approach to management of Arctic resources.

Statoil and its affiliates comprise an international energy enterprise with operations in forty countries. We have more than thirty-five years of experience from oil and gas production on the Norwegian Continental Shelf, where we operate 80% of the production. Statoil is the largest offshore operator in the world, and we are committed to accommodating the world's energy needs in a responsible manner, applying technology, and creating innovative business solutions.

Statoil began building its upstream petroleum assets in the US market in 2002, and we have invested over \$14 billion to grow our upstream business. Statoil is one of the largest leaseholders in deepwater Gulf of Mexico and holds significant positions in the Alaska Chukchi Sea. Over the past two years, we entered into joint venture agreements for onshore gas production in several eastern states and Texas.

In 2008, Statoil acquired sixteen leases during the MMS's OCS Lease Sale 193 in the Alaska Chukchi Sea. We successfully completed a 3-D marine seismic program on our leases and adjacent areas during the open water season of 2010 and are planning a shallow hazards and soil investigation program for the 2011 open water season. Statoil is also a 25% owner in ConocoPhillips' Devils Paw prospect in the Chukchi Sea and has worked cooperatively with Shell and ConocoPhillips to collect environmental baseline data in the region over the past three years.

Statoil recently participated in an extensive research program regarding oil spill response capabilities in Arctic waters. We aim to continue to improve our knowledge about oil spill response and are playing an active part in joint industry efforts to further strengthen oil spill technology in Arctic conditions. We will continue to incorporate the most advanced and effective spill response techniques in any future exploration in the Chukchi Sea.

Overcoming the challenges to exploration in the Chukchi Sea requires significant investment and a regulatory environment that is predictable, stable, and transparent. Exploration in the Alaska Arctic is at a critical stage. To ensure continuing investment, it is important that BOEMRE expeditiously finalize the SEIS, reaffirm Lease Sale 193, and vigorously defend its decision-making from any challenges.

Statoil has reviewed the Revised Draft SEIS for Sale 193 and believes it thoroughly addresses the concerns identified by the District Court of Alaska. Further, the addition of the Very Large Oil Spill (VLOS) scenario represents a thorough analysis of a hypothetical, catastrophic spill. We have two requests of BOEMRE with respect to the VLOS analysis.

First, the SEIS would benefit from an unambiguous description of the components that are included and excluded from the VLOS analysis. For example, reference to spill response in the VLOS discussion is confusing insofar as it may cause some readers to assume—incorrectly—that spill response efforts play a role in the calculation of the VLOS. Similarly, the SEIS should include a clear discussion of risk to put the probability of impacts resulting from a low probability VLOS into context.

Second, the SEIS should more clearly address the distinctions between the VLOS analysis— which BOEMRE has undertaken under NEPA— and the worst case discharge (WCD) analysis that occurs under the auspices of an Exploration Plan. The VLOS scenario is a planning tool for environmental impacts analysis that represents an improbable, extreme case. This hypothetical VLOS scenario differs from the WCD calculation, which is site-specific and calculated in accordance with applicable regulations. We believe there is potential for the public, organizations and government agencies to confuse the VLOS and the WCD methodology when the WCD is being developed in the context of individual Exploration Plans. Hence, we encourage BOEMRE to more clearly address and emphasize the distinctions between the VLOS analysis and the WCD. This will minimize the possibility that the VLOS will, in any subsequent proceedings, be inappropriately taken out of context.

In closing, Statoil commends BOEMRE for developing the Revised Draft SEIS on a quick timeframe and looks forward to BOEMRE's timely adoption of the preferred alternative. The preferred action is a solid step towards fostering a predictable regulatory climate that encourages responsible oil and gas investment in the Chukchi Sea, while ensuring a balanced and environmentally responsible approach to management of Arctic resources.

Thank you for consideration of our comments.

Very truly yours,

James R. Meek, Vice President, Commercial & Negotiations
Statoil USA E&P Inc.

Statoil USA E&P Inc.

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June 6, 2011



James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

While Texlore is not currently active in Alaska, I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed, in order to maintain America's domestic energy supply.

Currently the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped in 2011 while OPEC projection is slated to increase in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health, contributing to our trade imbalance, weakening the dollar, and increasing public debt.

It is imperative that BOEMRE allow America to develop all of its abundant energy resources, those in Alaska's Outer Continental Shelf included. The United States continues to import oil from unstable, adversarial countries, despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only puts the United States at risk for disruptions in supply and price instability; it also supports repressive and anti-American regimes and endangers American lives.

I believe BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Paul W. Britt, President



**THOEM AND ASSOCIATES
EH&S CONSULTING SERVICES**

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's and my personal support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

As I am sure you know, the United States currently imports more than half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 to a total of only slightly above 5 million barrels per day, while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health. This situation is not sustainable for USA economic security.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move quickly and efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly

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(281) 578-1559 office * (281) 578-8431 home * (832) 722-4161 cell * (281) 578-1559 fax



**THOEM AND ASSOCIATES
EH&S CONSULTING SERVICES**

affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Terry L. Thoem

President, Thoem and Associates



TOTEM OCEAN TRAILER EXPRESS, INC.



REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

2511 Tidewater Road
Anchorage, Alaska 99501

Tel: 907-265-7237
Fax: 907-265-7289

July 5, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Re: Support Revised Draft SEIS, LEASE SALE 193 Chukchi Sea

Dear Mr. Kendall,

As an Alaska Citizen, I urge BOEMRE to affirm the Lease Sale 193 and responsibly expedite permit approvals that allow lease tracts to be explored and developed without further delay. We need this action to keep Alaska economically viable for our children and future generations.

Respectfully,

Greg Kessler
Director of Alaska Commercial
greg.kessler@totemocean.com
907-265-7237
907-244-9961

June 29, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



TRANS PACIFIC OIL



RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Alan D. Banta
President
Trans Pacific Oil Corporation

WAFB 202 2096 Fax 814 267 7188 Tx 415 2214 4064 Fax 303 2265 0725
100 South Main, Suite 200 Suite 1223, Denver, Colorado 80202
Wichita, Kansas 67202 517 Richmond, Daytona Ave. Suite 109 Miami

July 8, 2011

VIA EMAIL

James Kendall, Regional Director
BOEMRE - Alaska OCS
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: **BOEM - 2010-0043**
Comments on the Revised Draft SEIS, Lease Sale 193 - Chukchi Sea

Dear Mr. Kendall:

The Transportation Institute (TI) wishes to urge the Secretary of the Interior and the Bureau of Ocean Energy, Management, Regulation and Enforcement ("BOEMRE") to finalize the Environmental Impact Statement (EIS) and affirm the Chukchi Sea Lease Sale 193 as held in 2008. In so doing the agency will assure a steady flow of oil and gas is available to our nation, sustain the economy of Alaska, provide critical tax and leasehold revenue for the federal budget, increase America's energy security, and support the U.S.-flag merchant marine.

The Transportation Institute was established in 1967 as a Washington-based, non-profit organization dedicated to maritime research education and promotion. The Institute companies participate in all phases of the nation's deep sea foreign and domestic shipping trades, and barge and tugboat operations on the Great Lakes and on the 25,000 mile network of America's inland waterways. These operations embrace deep-sea and river passenger vessels, and liquid, dry-bulk, container and special purpose ships. Many are contracted to the U.S. military services. All are of U.S. registry -- crewed by American citizens operating under the world's highest safety standards, and proudly flying the American flag. With offices on the east and west coasts, the Transportation Institute supports a wide range of programs that promote the strength of America's maritime capability. Our member carriers in the Alaska trade directly impacted by this crucial EIS decision include Crowley Maritime Corporation, Horizon Lines, Alaska Tanker Company, Seabulk, Inc., and Totem Ocean Trailer Express, Inc.

Offshore oil and gas development in Alaska will strengthen our energy security and generate significant new revenue for the federal government. Recent estimates peg this region as having 27 billion barrels of oil and 132 trillion cubic feet of natural gas. Consequently, energy production on Alaska's Outer Continental Shelf (OCS) is critical to our country's long-term energy security. Furthermore, government revenue generated from the Chukchi Sea is estimated to approach \$50 billion over the next fifty years.

The United States continues to rely on oil and gas from nations whose stability and existence remain uncertain or who are in open conflict with us. Such dependency invariably leads to supply disruptions and threatening economic pressures. Such volatility is ever more intimidating to a population having withstood years of economic decline or stagnation. Despite efforts to diversify our energy resource base through non-fossil fuel, alternative wind, current, and solar energy, and significantly reduce energy consumption, we will be dependent upon petroleum for a good measure of our energy needs for decades to come.

Development of Alaska's OCS is estimated to create and sustain 55,000 jobs over 50 years in Alaska alone. The oil to be developed from Alaska's OCS will flow through the Trans-Alaska Pipeline System (TAPS). This pipeline has seen years of declining oil output and experts have become concerned that continued low levels of oil throughput will result in significant and prolonged strain on the line and consequent rupture or premature

Transportation Institute Comment

closure. OCS oil resources will reverse this trend and help to reduce operational deficiencies on a pipeline that currently provides 12 percent of our nation's domestic supply of oil.

Furthermore, the oil flowing through TAPS to tidewater in Valdez is then carried on U.S.-flag merchant vessels along the West Coast and Hawaii. These vessels and the officers and crew that operate them have considerable military utility and are relied upon by our government and military to be counted upon when facing defense and emergency contingencies. Other vital skilled maritime positions would be created through the development and exploration of OCS oil and gas as well as those jobs hauling additional cargo from the Lower 48 as Alaska's economic growth gives rise to additional business, industrial, and personal expenditures.

The benefits of energy production on Alaska's OCS are critically important to our domestic energy security and to the maritime industry, which depends upon a stable supply of fuel to deliver cargo throughout the United States. The abundance of quality Alaskan oil and gas will help our industry meet the imposition of federal Environmental Protection Agency requirements for drastic marine engine emission reductions as promulgated for all transits within 200-miles of the North American shoreline. These new strict rules were imposed through the U.S. and Canada adopting via treaty a North American Emission Control Area. Furthermore, the maritime industry, as encouraged by federal policymakers, environmentalists, and transportation planners, is seeking to create an alternative to our deteriorating road infrastructure through a burgeoning maritime highway system. This freight transportation alternative would drastically reduce emissions and pollution per ton/mile of cargo carried and averts growing congestion on our highways and rail corridors. However, its viability is greatly dependent upon access to a dependable supply of fuel at a reasonable cost. Alaska's OCS assets are a most certain part of this equation.

We trust Secretary Salazar and BOEMRE will recognize these concerns, finalize the environmental review process, and quickly move forward with Lease Sale 193. Thank you for providing this opportunity to share our thoughts on this matter.

Respectfully submitted,

Richard Berkowitz
Director, Pacific Coast Operations

PUBLIC SUBMISSION

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Tracking No. 80ec0021
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0117
Comment from Charlie Allen, Tyler Rental Inc.

Submitter Information

Name: Charlie Allen
Address:
P.O. Box 8001
Ketchikan, AK, 99901
Email: n/a
Phone: 907-225-0140
Organization: Tyler Rental Inc.

General Comment

Dear Mr. Kendall,
I am writing to support the oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement to proceed with the lease sale 193. I believe that the draft supplemental environmental statement for the lease sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf.
We as Americans should work together to utilize the resources that we have available to both help reduce our dependency on foreign oil and to promote jobs and economic growth. The proposed drilling in the Chukchi Sea would occur in water depths that are close to those in the shallow waters of the Gulf of Mexico, drilling in the shallow waters in the Gulf of Mexico has been done for years with a long history of safe operation.
Thank you for the opportunity to comment on this issue and I urge BOEMRE to affirm the Chukchi Sea Lease sale 193, and promote the reinvestment in America.

Sincerely,
Charlie Allen



UDELHOVEN

Offield System Services, Incorporated

RECEIVED
JUL 7 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

184 East 53rd Avenue
Anchorage, Alaska 99518-1222
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June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

James Gilbert
President

An Alaskan Corporation
Established 1970

North District
P.O. Box 340103
Prudhoe Bay, AK 99734
907-659-8093

South District
P.O. Box 8349
Nikiski, AK 99635
907-776-5185

THE WILSON AGENCY LLC
Bringing Benefits to Life

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JUL 7 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

James Kendall, Regional Director
Alaska OCS Region
BOEMRE
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

June 23, 2011

Dear Mr. Kendall,

I am writing to express my company's support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. We believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, we urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, we believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Lon G. Wilson
President

3000 A Street, Suite 400 • Anchorage, AK 99503 • 907.277.1616 TEL • 907.274.7011 FAX

July 10, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

RE: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, I strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,

Robert H. ...
Regional Director

James Kendall
Regional Director

907-344-1577
907-522-2541



General Public

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
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 Posted: July 11, 2011
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 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0066
 Comment from George Angus, TWS

Submitter Information

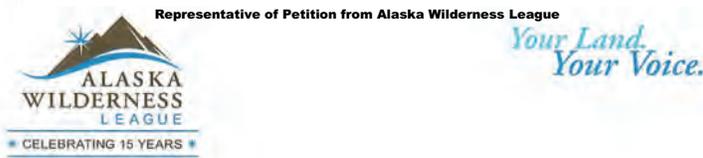
Name: George Angus
 Address:
 7041 Lea Street
 Apt C
 Palmer, AK, 99645
 Email: tumblemoose@yahoo.com
 Phone: 907 982-7244
 Organization: TWS
 Government Agency Type: Federal
 Government Agency: BOEM

General Comment

I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska's Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage only in "ancillary activities" that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state's OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. Alaska's North Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really could fuel Alaska's economy and provided much needed energy for the nation for decades. Again, please adopt the SEIS and reaffirm Lease Sale 193

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Missouri
- Mark Wolf-Armstrong
Washington

Dear Secretary Salazar,

On behalf of the undersigned Minnesota citizens, we urge you hold on any risky development in America's Arctic Oceans until more information is known about the ecosystem, wildlife and needs of local communities, and there is dependable, reliable, and realistic technology and infrastructure to clean up an oil spill in the Arctic's icy, stormy conditions.

Please accept these signatures for the record:

Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea" to the Regional Director, Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region, 3801 Centerpoint Drive, Suite 500, Anchorage, Alaska 99503-5820.

Sincerely,

Lois Norrgard
 Alaska Wilderness League
 10368 Columbus Circle
 Bloomington MN 55420
 952-881-7282

Main Office
 122 C St NW, Ste 240, Washington, DC 20001
 Tel: 202-544-5205 * Fax: 202-544-5197



Field Office
 943 W 6th Ave, Ste 132, Anchorage, AK 99501
 Tel: 907-222-4046 * Fax: 907-222-4047
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Representative of Petition from Alaska Wilderness League

Petition to Protect America's Arctic Ocean

Dear Secretary Salazar:

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no decisions about drilling in Arctic waters are made before a plan is in place to gather basic essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential Commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science - from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

please print clearly and fill out the information completely.

Name	E-mail	Address	City	State	Zip
Trish Brock	QUICKER@AOL.COM	1801 1ST AVE SE	MINNEAPOLIS	MN	55403
DAVID HOWE	Howe@seminole.com	1246 Sugar Hill	Fortville	IN	46033
PATRICIA TELFER	Howe@seminole.com	8102 HIGHLAND DR BR 33	BLOOMINGTON	IN	47436
JORDAN TELFER	Howe@seminole.com	11	11	11	11
TERRY HOWE	TEREY99@AOL.COM	8331 N. TINE CIR	BLOOMINGTON	IN	47437
JUSTIN MILLER	JUSTINMILLER@GMAIL.COM	2805 GREEN GLEN	MINNETONKA	MN	55305
LOIS NORRGARD	LOISNORRGARD@GMAIL.COM	10368 COLUMBUS CIR	BLOOMINGTON	MN	55420

By signing the petition today, you will be guaranteed to receive email updates and action alerts from Alaska Wilderness League to help keep Alaska wild!

Please return completed petition to: Alaska Wilderness League, 122 C St. NW, Suite 240, Washington, DC 20001

Representative Form Letters of 29,676 submitted by Alaska Wilderness League



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Washington

Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Regional Director
 BOEMRE Alaska OCS Region
 3801 Centerpoint Dr. Ste 500
 Anchorage, AK 99503-5820

Mr. Regional Director,

Please find the enclosed comments from 29,676 individuals regarding the Revised Draft SEIS, Lease Sale 193. We encourage you to count each as an individual comment.

Sincerely,
 Leah Donahey
 Western Arctic and Oceans Program Director
 Alaska Wilderness League



JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
 MAKES US YOUR BEST SERVICE
 FROM THE ALASKA

Main Office
 122 C St NW, Ste 240, Washington, DC 20001
 Tel: 202-544-5205 * Fax: 202-544-5197



Field Office
 810 N Street, Suite 203, Anchorage, AK 99501
 Tel: 907-222-4046 * Fax: 866-591-4437
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Basil Abbott
223 bella vista circle, TX 75189
This oil will only be sent to the Chinese or Japanese and will not alleviate any shortages here or reduce our prices. It will only enrich Shell and the fat cats in the old boy network

Patricia Abbott
264 Ponce De Leon St, Royal Palm Beach, FL 33411
In addition to the physical environmental damage of oil drilling, we now have the dire predictions of the newly released report on the state of the oceans.
<http://www.bbc.co.uk/news/science-environment-13796479>
Adding more carbon from oil wells to this already critical situation and in an ecologically fragile area makes absolutely no sense at all.
More eco-friendly alternatives to oil drilling must be made a priority.
No more oil drilling. Period.

RIBA Abe Hayeem
100 Whitchurch Lane, London, DC 20000
No way should BP or any other company be allowed to take the risky steps to destroy the Arctic eco system.
There should not now or ever be allowed any oil exploration on these precious remaining seas.

Martha Abell
390 Pleasant Street, Rome, PA PA 18837
Right now, I am drinking water from our spring, which gets tested once a week because there is natural gas drilling going on in the vicinity. It is not just the wildlife, but we humans who could be affected. Do you want the name Ken Salazar to be up there with Benedict Arnold? Don't sell us off on an ice floe.

Robert Acker
1542 Saint Andrews Cir, Elgin, IL 60123
Please do not approve permits for Shell Oil to drill in the Arctic Ocean. I shudder to think of the devastation that would result when (not if) there is an oil spill of any dimension there. It would dwarf the disaster caused by the spill in the Gulf last year.

Richard Acuzzo
400 Mission Ranch Blvd Apt 152, Chico, CA 95926
Why ruin such beautiful pristine land???

Eric Adam
Prescott, AZ 86305
Go Solar..

Brenda Adams
Portland, OR 97217
SHAME ON YOU MONEY GRUBBING HOUNDS! Must you ruin the entire works? Get thos SIX WELLS OUTTA THERE! You aren't prepared to handle a mishap any better now than BP was in the Gulf? Get out of there entirely!

Carol Adams
14851 Jeffrey Rd Spc 63, Irvine, CA 92618
Isn't it interesting how you (Shell Oil Co.) are playing God, distroying part of the world forever for money! How much money do you need anyway??!

Tracey Adams
9475 Santa Barbara Rd, Atascadero, CA 93422
What are you guys thinking, this will destroy more of our fragile ecology and not produce enough or in a timely enough manner to make a bit of difference.

Frank Aguilera
Itasca, IL 60143
The oil industry receive subsidies while we receive nothing except more taxes to pay off debt. High gas prices and the speculators who buy then sell it weaken our economy. Rewarding greed victimizes millions while propelling this nation

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Luke Ashby
286 Homer Ave, Ventura, CA 93003
YOU need to act to STOP THE ONGOING DESTRUCTION OF OUR PLANET!

Kate Ashley
2673 Carolina Ave, Redwood City, CA 94061
No. We continue to follow a dead end in energy resources when we should be supporting renewable energy resources.

L.M. Ashley
2450 28th Ave, Sacramento, CA 95822
Ecosystems and wildlife need to be protected from pollution. It's time to move past oil drilling and realize we need to do better.

Greer Ashton
PO Box 434, Cos Cob, CT 6807
Until we can be completely assured of safety, should another disaster occur, we must be sure that any oil leak can be stopped immediately. According to reports, no changes have been made at all in repairing or retooling the shut-off system!

Linda Ashworth
2520 G STREET, SPRINGFIELD, OR 97477
PLEASE DON'T SPOIL WHAT LITTLE WE HAVE LEFT. WE COULD WORK HARDER AND FIND ALTERNATIVE SOURCES. ALL OF US HAVE TO CHANGE OUR HABITS. IT IS NOT COMFORTABLE TO DO BUT PLEASE DON'T GIVE IN TO BIG OIL COMPANIES. WE NEED OUR LIVES AND LAND TO BE CLEANED UP, NOT CLEANED OUT.
THANK-YOU FOR YOUR CONSIDERATION
LINDA ASHWORTH, OREGON

Serwaa Askia
5 Wabash St, Boston, MA 2126
This needs to stop. This is our only planet and we need to protect it! Future generations dont care about money, they care about having a healthy living planet to live on. You would rob them of this for money? Shame and karma on you!!

Sigrid Asmus
4009 24th Ave W, Seattle, WA 98199
This is a watershed moment with respect to contracting with private corporations making private profits to drill in the Arctic. I ask you to resist lobbyist pressure, and reject Shell's expanding plan to now drill TEN new wells in the Arctic. Please do not permit this; Shell is no more concerned with our irreplaceable environment than BP was: both are dangerously unsafe, environmentally disastrous, and drastically unrealistic.

David Atwood
10641 S Hale Ave, Chicago, IL 60643
Based on General Electric's projections for alternative energy in the short term, there appears to be little reason to plunder our natural resources by further drilling. Fossil fuel demand is on its way down.

Kristie Atwood
13990 N Sutherland Trl, Tucson, AZ 85739
This administration needs to do more to protect our environment. It is partly why I voted for President Obama, but I am becoming more and more disappointed. Please don't disappoint me again.

Frances Aubrey
764 Coventry Rd, Kensington, CA 94707
"Serious concerns" and "special considerations" mean STOP, until ALL the SCIENCE IS IN. In 2008 I campaigned hard in Pennsylvania to elect President Obama, driving up from Baltimore every weekend for the eight weeks before the election. I BELIEVED THAT HE WOULD RESPECT SCIENCE, NOT IGNORE IT. Now I need him and his secretaries to honor that pledge!

Jean Auris
2703 S Pebble Brook Dr, Homosassa, FL 34448

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Wanda Ballentine
1359 Chatterton Rd, Eagan, MN 55123
If you can't realize from all frightening weather reports from all over the globe that we CAN'T CONTINUE TO POUR OIL INTO THE SKY!!! We are destroying ourselves, to say nothing of the rapid destruction of oceans and fishing or the continual poisoning of us and all animals, It's beyond unbelievable.

Ghida Banat
510 E 3rd St Apt 315, Pomona, CA 91766
Don't allow the destruction of our oceans and ecosystems. Do what is necessary to stop this atrocity.

Hannah Banks
107 Garland Rd, Newton Centre, MA 2459
Isn't time we put a stop to destroying our heritage?

Robert Bard
19A Summer St., Easthampton, MA 1027
Invest all this money and research in clean, green energy sources, please!!!

Chuck And Betty Barker
5711 100th St NE Unit 36, Marysville, WA 98270
get the oil in the Dakotas and Montana first, I understand there is a trillion barrels there

Jennifer Barnes
5229 W Michigan Ave Lot 342, Ypsilanti, MI 48197
We need wind farms and solar panels not more oil wells, especially in the Arctic.

John Barnes
4729 Kilpatrick Ave., Fort Worth, TX 76107
Enough is enough!!

Linda Sue Barnes
6713 Wade Stedman Rd, Wade, NC 28395
At the current time there is no safe way to drill for oil in the Arctic. Oil from the Exxon Valdez spill in 1989 is still present on those shores and scientific studies estimate that is is decreasing at well below four percent per year, probably less than one percent per year. The oil is still highly toxic and still affecting wildlife.

Betsy Barnett
13132 Verberna Pl NE, Albuquerque, NM 87112
This from the ISPO et al. expert workshop on ocean stresses, June 2011. <http://www.stateoftheocean.org/pdfs/1906IPSO-LONG.pdf>. "The workshop enabled leading experts to take a global view on how all the different effects we are having on the ocean are compromising its ability to support us. This examination of synergistic threats leads to the conclusion that we have underestimated the overall risks, that the whole of marine degradation is greater than the sum of its parts, and that degradation is now happening at a faster rate than predicted."
Mr. Secretary, we do not need that oil. I am so tired of the Administration's inclination to cave to the spin of the industries and corporate media. The Intergovernmental Panel on Climate Change says renewable energy can power the world. Renewable energy can be developed much faster than oil extraction in the Arctic and transportation to consumer populations.

Teresa Barnhill
1002 S 202nd St, Des Moines, WA 98198
The environmental price is too high, simply recall the devastation caused by BP in the Gulf. A disaster of that magnitude in Alaska would be even more catastrophic. This country must pursue alternative energy, not destroy the planet to continue supporting greed and profits of big oil.

Sheila Barrand
28032 Festivo, Mission Viejo, CA 92692
Extinction is forever.

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Marliese Bonk
1335 Commercial St, Pittsburgh, PA PA 15218
Secretary Salazar, you are a failure as Secretary of the Interior and, subsequently, you're putting our fragile eco-system an the entire US population in jeopardy!

William Bonner
3941 Gloucester Ct, Bensalem, PA PA 19020
The whole Country is going to hell in a hand basket. Please dont let this happen.

Edith Borie
Friedrich-Naumann-Str 109, Karlsruhe Germany, NY 12561
The food resources from the Arctic Ocean are much more important than oil. No one can eat or drink oil. And company profits should not be more important than people's survival.

Annette Bork
4505 Sandburg Way, Irvine, CA 92612
Preserve this part of Earth.
Find other sources of energy.

George Borkenhagen
Beloit, WI 53511
Drilling at sea is uncalled for at this time. Drill in the lower 48 in the dirt.

Deborah Born
520 SE 30th Ave, Ocala, FL 34471
Please tell Shell Oil to have a plan to cope with an oil spill before they begin drilling new wells.

Ronald Bosch
41 Norwood St, Greenfield, MA 1301
Does this benefit the American People? No, it benefits the already filthy rich stockholders at everyone else's expense. That's why this land must remain as it is with no chance of it getting ruined by a spill like we have never witnessed before.

Patrick Bosold
202 N 5th St, Fairfield, IA 52556
Moratorium on ANY new oil wells in the Arctic Ocean. PLEASE!!!

Margaret Bosse
1836 Estrada Pkwy, Irving, TX 75061
How can you believe oil companies whose very attitude is to lie to you just so they can fill their coffers at the expense of our world ecosystem. It is beyond stupidity, it is criminal to allow this expansion of fossil fuel drilling when we have sufficient green energy and methods to power the world. Please don't allow these earth rapists to continue to do so.

Kiah Bosy
18 Grove Ln, San Anselmo, CA 94960
What will it take for you to stand up and stop the destruction of our environment. If we haven't noticed we actually need the stability of the environment to have a somewhat balanced weather system on our earth and if that changes we ain't gonna have any food, including you and your family!!!! Wake up!

Marla Bottesch
PO Box 458, Norridgewock, ME 4957
We cannot eat or drink oil. That is really the bottom line. We CAN find better energy sources, even tho we may have to tighten our belts to do so, and perhaps even do without for a while. But that will NOT kill us off. Messing with the environment will eventually.

Bo Boudart
PO Box 7395, Menlo Park, CA 94026
There is no technology to clean up oil spills in broken ice conditions of the Beaufort or Chukchi Seas where currents push around ice packs the size of Manhattan. Any sudden movements would flatten wells and prevent blow out preventers from even being accessed. So the bottom line is that drilling for oil in the arctic is a catastrophe waiting to happen-not

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Just a question of if, just a question of when. The Inupiat people of the arctic coast have always warned that to gamble with the forces of the arctic ice is not worth sacrificing an ocean. Say no to all offshore drilling in the arctic seas, because the technology is not there to clean up accidents at all. Past oil spill response exercises have proven that beyond any doubt. So oil companies have no right to drill because their technology is totally inadequate.

Paula Bourgeois
108 Cedar Trl, Woodland Park, CO 80863
Don't let Shell or any other oil company drill in the Arctic till it is a proven fact beyond a doubt that the Arctic ecosystem can not be jeopardized in any way.

Cynthia Bower
1804 N Spanish Moss Ave, Tucson, AZ 85715
Must we move to alternative, renewable energy resources has never been more urgent. Do not approve ANY oil wells in Arctic waters without full review of their potential impacts. With its billions of dollars in profits, Shell and the other big oil companies can certainly afford to invest in less destructive sources of energy and should be encouraged to do so.

Anne Bowman
14101 Arbor Hills Rd, Tampa, FL 33625
Don't end up like Florida.

Glynis Boyd
1609 Stanhope Kelloggsville Rd, Jefferson, OH 44047
this is an appalling development. the arctic is too fragile for this drilling operation. the ecosystem will not recover a spill like the Gulf. the gulf has not recovered this spill.

Lorraine Brabham
1313 Grand St Apt 511, Hoboken, NJ 7030
Lets begin NOW in taking care of the earth!! Help us find alternatives to fossil fuels!!

joyce bradley
Laguna Beach, CA 92651
When there is a spill, Then what? The ecosystem is gone. We need different types of energy. We can't destroy anymore ecosystem.

Sabine Bradley-Phillips
5416 3/4 Fountain Ave, Los Angeles, CA 90029
Mr. Salazar is no friend of the environment and so far has shown to just cater to big interests. His record is dismal!!!

Anke Brady
1469 Tyler Park Way, Mountain View, CA 94040
Make the oil companies responsible for their acts. Make sure they are as careful with our environment as possible so that there is an environment to leave to our children and grandchildren.

Jenny Bramlette
5909 Estes Ln, Wesley Chapel, FL 33545
Not again! No more disasters in the making. Your campaign contributions may have congress fooled, but not those of us that cares about our homeland!

Mary Ann Brant
Juneau, AK 99801
Please don't do it. It isn't worth the risk to the ocean and marine life.

Patricia Brech
5813 Richardson Mews Sq, Baltimore, MD 21227
Please do not allow another disaster from deep water drilling. It will be far more difficult, if not impossible, to clean up in the Arctic compared with the gulf (which is far from clean now, as you well know).

Bonnie Breckenridge
4143 44th St., San Diego, CA 92105
How can this even be considered after the disaster in the Gulf, a much friendlier environment than the Arctic! Our oceans

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I have been following this in the news and in my opinion allowing them to do this in this area is asking for a disaster large enough to make the gulf coast spill look like an oil leak under a car in my driveway. Please stop this plan.

Rachel Fast
Honor, MI 49640
When will destroying our planet be enough? Why not encourage Shell to spend their money on alternative energies rather than oil?

Jane Fasullo
Old Field Rd, Setauket, NY 11733
Must we put the rare pristine places on earth at risk? Can't we find a better way? We will need an out-of-this-earth solution if we can't get off this energy-at-any-cost merry-go-round. We will stop destroying our air, water and soils when we are all gone and that day seems to be more rapidly approaching. Human intelligence is becoming an oxymoron.

Judith Faulkner
16 Parsons Ct, Mahwah, NJ 7430
We don't need the little bit of oil as much as we need the Arctic without an oil disaster.

Tahira Faune Alford
Brooklyn, NY 11229
Invest in clean energy. Why risk any more death and sickness with these polluters? Their track record does not prove any respect for life.

**Joel Fears
722 Mercedes Ave, Daytona Beach, FL 32114
The product of the oil industry produces green house gas emissions, which further causes a hazard to the environment according to Environmental Protection Agency. So, please reject Shell's plan for 10 new Arctic oil wells.**

Karen Fedorov
8044 Tackett Ln, Bealeton, VA 22712
Clean energy, not dangerous offshore drilling! Stay out of the Arctic.

Roger Ferguson
10810 Hart Ln NE, Bainbridge Island, WA 98110
Let's get responsible here! NO NEW OIL WELLS!!!

Christina Fermin
3810 SW 58th Ave, West Park, FL 33023
No more oil in sensitive eco areas, save our Earth from destruction!!!

Yumi Fernandez
los angeles, CA 90018
Stop killing the planet, let learn to survive and take care of what we have left, our children are growing stop wasting their future...

James Ferrigno
118 Miramar Ave, San Francisco, CA 94112
Please do we really need oil that bad? No we do not.

Max Ferry
1412 5th St, Tillamook, OR 97141
The oil industry has failed to prove that it can drill responsibly, and the circumstances of the Deepwater Horizon disaster not only would seem to prove the opposite, but also seem to prove that the industry is willing to take dangerous shortcuts in order to improve their bottom line. We have hundreds of wells in the Gulf of Mexico right now that threaten to go the way of DWH because of this mind-set...we do not need more of the same in the arctic.

Tom Ferry
7 Justin Ln, Coatesville, PA PA 19320
Will you GET OFF the fossil fuel use and start investing in renewable, sustainable energy before you drive us all to extinction as a result of the ignorant/blind continuation of the use of these pollutants?

Representative Form Letters of 29,676 submitted by Alaska Wilderness League

Dianne Gavula
28710 Farwell St, Chesterfield, MI 48047
Why would any rational human or corporation risk long term destruction of the environment for short term monetary gains? Greed? Aren't we better than that?

anne gayler
Monroe, NY 10950
Please stop the destruction!

Victoria Gaynor
6843 Burns St Apt A1, Forest Hills, NY 11375
Enough is enough! This is the only planet we have to live on yet we continually destroy it.

Ronald Gedrim
303 La Plata Rd NW, Albuquerque, NM 87107
We can make the transition to clean energy most quickly by assessing the true costs of energy types including environmental degradation and disaster, ending unfair subsidies and tax breaks, and putting our money into clean sources. Stop the stranglehold of big oil, coal, and nuclear and return the production of energy to and for the American people. Stop the corporate abuse.

Edgar Gehlert
150 Rosh Rd, Rogersville, TN 37857
no drilling until all safety measures are in place:: we don't need another B.P.

Judy Gehrig
106 Candlelight Ct, Durham, NC 27707
When will we learn? Please stop the off-shore drilling.

**Susan H. Geick
Richmond, CA 94806
Has nothing been learned from the Gulf oil spill? With no technology in place to deal with an inevitable spill how can Shell's proposal be granted. Walrus are bottom feeders, meaning they would be harmed for years by any spill. Do you want that reasonably foreseeable disaster on your watch? Please, just say no. Thank you.**

Blair Gelbond
Brighton, MA 2135
Karm-uppance: What you do will be done to you and yours - sooner or later.

Genny Genevich
8 Llama Rd, El Prado, NM 87529
Wake up! Wake up! Wake up!
It is beyond my comprehension that the majority of those of you in the Administration and Congress CANNOT SEE "the forest through the trees" because of your blinding greed, favoritism, and loyalty to the Corporate world rather than the Earth, humanity, and all of creation.

Merideth Genin
543 East 6th Street, New York, NY 10009
I have numerous friends in Alaska. In the past year, one of them made a trip to see what the Sound looked like twenty years after Exxon Valdez. Unsurprisingly, the beach is full of oil. It's under every rock. There is no way to clean up oil spills, particularly so far north.

Dianne George
Wildomar, CA 92595-0101
I only saw plans for 'a' new well in the Arctic -- Not six or ten; They are really escalating the price tag for future oil reserves-- think of the devastation if the probability of a spill goes from 1 in 1 oil rig, to 1 in 10 oil rigs --this is a simplification, but the probability DOES escalate. And no way to clean it up in the cold & extreme ice conditions of the Arctic -- "glorified mops & brooms," in deed!!

Representative Form Letters of 29,676 submitted by Alaska Wilderness League

Kitty Johnson
123 E 8th St Apt 132, Frederick, MD 21701
I have had it with Corporate interests superceding the public interest. The whole right wing agenda is based in lies and has no logical justification since it's goal is to enrich and empower a small number of extremely arrogant individuals who think they are God's chosen. Don't allow yourselves to be bought. There is no price that justifies the destruction of the environment.

Larry Johnson
2555 S Dakota St, Butte, MT 59701
How come we here in the USA pay as much for gas supposedly owned by the citizens as we do the stuff we buy from abroad. there is something fishy about this whole darned set up. Oil like all publicly owned resources should not consered property of the oil companies. They are stealing public property and then selling it back to us. ???We are stupid letting this happen.

**Marci Johnson
PO Box 641, Kotzebue, AK 99752
As a wildlife biologist in the arctic, I acknowledge the paucity of baseline data on marine and coastal environments and have not witnessed sufficient dialogue with local residents, policy makers, researchers, and industry together in a productive forum. With an entire ecosystem and culture at stake, our nation can afford to wait for the technology to catch up with industry's ambitions. Furthermore, while a corporation must describe how they intend to address a spill at the rig (frequently inadequate), the process should require foresight into response to spills from tankers supporting the drilling at full operations and address the overland pipeline's route, maintenance, and response before exploration even begins. Until our federal government can effectively promote and demonstrate energy conservation, our people and environment should not be asked to sacrifice for additional production.**

Mary L. Johnson
Winchester, NH 3470
We need to stop expanding oil production and increase our clean energy sources, such as wind, water, and solar.

Michele Johnson
216 lake tahoe dr, slidell, LA 70461
Did we not learn anything from BP's disaster in the Gulf of Mexico and the Exxon Valdez disaster in Prince William Sound, amongst many others that we rarely hear about? We cannot trust these oil companies to put safety first. Our health and environment should be the first priority. We need to stop trashing our planet - our only home - and start focusing our efforts toward clean sustainable environmentally friendly energy, conserving energy.

Michelle Johnson
2721 F St Apt 7, Sacramento, CA 95816
Save Alaska's environment!!!

Randy Johnson
2751 NW Scandia Loop, Bend, OR 97701
Simple, instead of drilling and continuing to do build an antiquated infrastructure that will have oil companies trying to utilize regardless of its negative impact, put the money into alternatives!!!!!!

Sharon Johnson
475-190th St, Osceola, WI 54020
Please protect this fragile ecosystem. We need to develop clean energy and not continue to destroy our heritage

Colin Johnston
181 Thornsberry Branch Rd, Louisa, KY 41230
stop the drilling.

DOLLYE JOHNSTON
Jackson, MI 49203
AT THIS RATE OUR WORLD WILL HAVE NO WILDERNESS

Gordon Johnston
2917 North Halleck Street, Portland, OR 97217

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0099
 Comment from Paul Axelson, Independent

Submitter Information

Name: Paul Axelson
Address:
 P.O. Box 7181
 Ketchikan, AK, 99901
Email: paula@norpac1.com
Organization: Independent

General Comment

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea
 Dear Mr. Kendall:

Thank you for the opportunity to comment on the Revised Draft SEIS, Lease Sale 193, Chukchi Sea.

The development of oil production in the Chukchi Sea is paramount in achieving energy security in the United States not to mention the economic benefits to the United States.

Time and industry awareness have proven that Lease Saile 193 and other leases in the Chukchi Sea can be developed safely and responsibly.

Again, thank you for the opportunity to comment and I strongly urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Best regards,
 Paul Axelson

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 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0058
 Comment from Megan Baldino, Shell

Submitter Information

Name: Megan Baldino
Address:
 3601 c street
 Suite 1000
 Anchorage, AK, 99503
Email: megan.baldino@shell.com
Phone: 907-771-7254
Organization: Shell

General Comment

In Washignton D.C. we hear about it almost daily, a cry from citizens across the country, "where are the jobs?"

Guess what? Alaska has the jobs if we develop our OCS resources. According to a study at the University of Alaska Anchorage by the Institute of Social and Economic Research, an annual average of 54,000 jobs, nationwide, over the next 50 years. But these jobs only manifest themselves if we say yes to OCS. Additionally, there is \$193 billion dollars in potential local, state and federal revenue. We can't afford not to develop Alaska's OCS.

The facts:

1. The USGS estimates there are 25 billion barrels of oil and 209 trillion cubic feet of natural gas in the Chukchi Sea.
2. We can safely and responsibly develop Alaska's Outer Continental Shelf. What we can no longer do, is delay what is best for our country.
3. Shell has a long, safe and successful history of drilling in Alaska, with wells drilled in the

- Arctic in the 1980s.
4. Drilling in OCS Alaska is shallow water drilling, will only happen during the open season, and will stop during subsistence whale hunting.
 5. Demand for energy is increasing and the U.S. has an obligation to develop its own resources for the good of our nation.
 6. There is plenty of science.

It's time. Time to create revenue and jobs for the United States. Time to do what's right for our country.

Thank You,
 Megan Baldino

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Alice Barnett Comment

PUBLIC SUBMISSION

As of: July 25, 2011
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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0007

Comment from Alice Barnett, Citizen

Submitter Information**Name:** Alice Barnett**Address:**12610 Neher Ridge Dr
Anchorage, AK, 99516**Email:** alice.g.barnett@gmail.com**Phone:** 907 334 9601**Organization:** Citizen**Government Agency Type:** Federal**Government Agency:** BOEM**General Comment**

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous

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Alice Barnett Comment

mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well

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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0127

Comment from Mary Barr, none

Submitter Information**Name:** Mary Barr**Address:**9441 Strathmore Dr
Anchorage, AK, 99502**Email:** ak031764@customcpu.com**Phone:** 907-248-2429**Organization:** none**Government Agency Type:** Federal**Government Agency:** BOEM**General Comment**

Please approve the lease sales in the Chukchi sea. The new draft SEIS speaks to the objections that were raised in July 2010.

- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

I strongly urge you to move forward with the lease approvals so we can begin to work on lowering the cost of fuel for the United States.

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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0133

Comment from Jerome Birch, n/a personal

Submitter Information**Name:** Jerome Birch**Address:**4740 E 115th Aveue
Anchorage, AK, 99516**Email:** jbirch@taigamining.com**Organization:** n/a personal**General Comment**

Lease Sale 193 should be affirmed as originally held in 2008. The extensive information accumulated and the analysis of it was more than adequate the first time. The practice of constantly coming up with reasons to redo a comment period or re-examine the comment period removes faith in the process and discourages business from investing in our countries oil future.

Offshore exploration is a critical aspect of our future energy needs and our nation's security. The Chukchi OCS is one of the best prospects our nation has for additional oil inventory. In addition to it being important to our nation's needs, it is also vital to Alaska's economic future. The environmental record of oil exploration and development in Alaska is the envy of the world. We have proven that responsible development can co-exist with with protecting the environment. Our country is in dire need of new energy sources. We will get them either by the high standards of environmental stewardship in our own development or by purchasing energy from sources that develop with a much lower environmental standard. It's obvious that for us to be responsible stewards of the environment, we should be doing our own development at our high standards.

Our nation is at a critical economic period. Our high energy costs on top of our high unemployment is a tragedy that we should be trying to solve. Producing our own oil, both onshore and offshore, is a major factor in solving our economic problems.

Respectfully submitted,
 Jerome I. Birch

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0025
 Comment from Elizabeth Blankenship, Self

Submitter Information

Name: Elizabeth Blankenship
Address:
 11427 Discovery View Drive
 Anchorage, AK, 99515-2751
Email: bethbeads@gci.net
Organization: Self

General Comment

After the disaster in the Gulf of Mexico you're still considering drilling in the Chukchi Sea? Seriously? When are we going to stop risking the health of the earth and it's people for short term gains.

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0125
 Comment from Susan Bucknell, self

Submitter Information

Name: Susan Bucknell
Address:
 PO Box 1401
 Kotzebue, AK, 99752
Email: susanbucknell@gmail.com
Phone: 907-442-2508
Organization: self

General Comment

I'm concerned about an incident at the June 21st BOEMRE hearing in Kotzebue.

In response to a question of mine about what happens to oil in the ocean, Conoco Phillips spokesperson Bruce St. Pierre replied that oil floats. End of discussion.

But when I had a chance to actually look at the revised draft supplemental EIS for Lease Sale 193, I found lots of references to oil both sinking to the ocean floor, and remaining in the water column. (See pages 146 and 147.) This seems particularly relevant because people at the hearing were saying the Chukchi Sea is safer to drill because it's so shallow. But those shallow waters are important marine mammal feeding grounds. Information about the possibility of oil and tarballs on the seabed and in the water column should have been an essential part of the discussion.

It's concerning that misleading information was presented during a BOEMRE hearing. And it's concerning the eight BOEMRE people in the room let that incorrect science pass without a word, because people didn't receive the benefit of accurate and full scientific information on which to base their comments.

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Susan Bucknell Comment

Before the meeting, we were told that "subject matter experts" would provide answers to questions. I'm confused about whether the ConocoPhillips representative acting as a subject matter expert for BOEMRE?

To sum up, it troubles me that an oil industry spokesperson was given the floor to respond to public questions and comments during the BOEMRE hearing, he used that opportunity to derail questions and discussion by stating inaccurate information, and BOEMRE staff allowed that misleading statement to stand.

I wonder if this is acceptable practice, and if industry representatives were allowed to make similar misleading statements, unchallenged, at other BOEMRE hearings on Chukchi Sea Lease Sale 193.

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0008
 Comment from Gary Cameron, Shell Exploration & Production Company

Submitter Information

Name: Gary Cameron
Address:
 3601 C Street, Suite 1337
 Anchorage, AK, 99503
Email: g.cameron@shell.com
Phone: 907-306-8429
Organization: Shell Exploration & Production Company

General Comment

- Rescinding the leases and allowing a de facto moratorium to continue will harm America's economy and discourage future industry investment.
- Allowing leases to go forward from Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Alaska OCS is a critical U.S. energy supply with up to 27 billion barrels of oil and 132 trillion cubic feet of natural gas potentially in place.
- Alaska OCS will create almost 55 thousand jobs per year, \$145 billion in payroll, and roughly 200 billion in government revenue over 50 years.
- The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- OCS production will bolster TAPS, which is now operating at one-third of its 1988 peak flow.
- Over 81% of Alaskans consistently support OCS activities.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law.

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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0115

Comment from Katherine Capozzi, Personal

Submitter Information**Name:** Katherine Capozzi**Address:**4316 Birch Run Dr.
Anchorage, AK, 99507**Email:** katherine.capozzi@gmail.com**Organization:** Personal**General Comment**

The very thorough process of research and permitting has already taken place. Please do not waste any more money and time by delaying OCS development. Let's make this happen and help reduce our dependency on foreign oil.

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Danielle Carlson Comment**PUBLIC SUBMISSION**

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 Status: Posted
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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0044

Comment from Danielle Carlson, Self

Submitter Information**Name:** Danielle Carlson**Address:**1300 W. 7th Ave. #209
Anchorage, AK, 99501**Email:** alaskadam@gmail.com**Phone:** 907-347-1750**Organization:** Self**General Comment**

I am writing to support drilling in the Chukchi Sea, in the area of Lease Sale 193. I also encourage the idea of drilling in the Beaufort Sea, and support a cooperative relationship with the State of Alaska and the federal government that yields revenue sharing from the proceeds of this venture.

It's not hard to explain why I am supportive of this action. Drilling is a technology that is more environmentally-friendly than it has been in past years, especially here in Alaska where our State Department of Environmental Conservation works so hard to protect the beauty and cleanliness of our beautiful state. "Drilling" is not a term that is feared or rejected here in Alaska; drilling provides access to Alaska's resources. Resource development is the bread and butter of Alaska's economy; Prudhoe Bay employs many up on "The Slope" and the oil they extract from the ground flows through the pipeline, and, really, straight into our state budget.

Oil puts people to work, places food on the table, builds roads and schools, keeps energy prices down, and provides a decent chunk of domestic oil production in the United States. As oil begins to not surge but trickle through the Pipeline, we can expect employment on "The

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Danielle Carlson Comment

Slope" to decrease, paychecks helping families to buckle, and the overall Alaska economy to suffer. Truth be told—if our state is going to survive, we need oil. Not only does it ensure our state's survival, but it also ensures our country's best interests. The less we rely on dangerous foreign oil coming from countries who do not operate in our best interests—and have in the past used revenue from oil to harm civilians and our men and women in uniform serving overseas—the better off our country and our allies are.

Drilling in the area of Lease Sale 193 has far too many benefits for it to be denied. The federal government is gazing at a tremendous opportunity for resource development and the establishment of fiscal stability. Thank you!



Regional Director, Bureau of Ocean Energy Management,
 Regulation and Enforcement, Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,

As a marine biologist and college professor who understands the ecological consequences of destroying the vital functions of our earth's ecosystems I ask you to learn more about the essential role of our Arctic marine and terrestrial ecosystems. The science shows that if we are to have a sustainable ocean into the future, one that allows a certain level of harvest, much less, limit the catastrophic consequences of human-caused global warming, we should be setting aside significantly large areas of our ocean as marine reserves, not opening them up for exploitation by oil companies who reap obscene rewards from the destruction of habitat.

The future of America's Arctic Ocean may be decided as soon as this summer. I'm writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up a spill in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America's Arctic Ocean. And I urge you to ensure that the oil industry's response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

Ms. Diane Carney

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July 11, 2011

James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193, Chukchi Sea

Dear Mr. Kendall:

Please accept the enclosed comments in support of the Revised Draft EIS and oil and gas development in the Chukchi Sea from individual Consumer Energy Alliance supporters as well as stakeholder organizations. In an effort to conserve energy and paper, you will find three electronic discs that contain these individual letters and the data of their signatories:

- Disc I contains 26,630 letters;
- Disc II contains 43,655 letters; and
- Disc III contains 57,299 letters.

In total, you will find 127,584 letters.

In addition, I have included official comments from the following:

- Consumer Energy Alliance;
- The Honorable Derrick Seaver;
- Wayne Wilkinson;
- Sailwinds Station; and
- Mid-Atlantic Petroleum Distributors' Association.

If you have any questions on these comments, their signatories, or any other matter, please contact me at ajoubert@consumerenergyalliance.org or 202-778-2103.

I appreciate the opportunity to comment on this important matter.

Thank you,


Natalie T. Joubert

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERAL MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Representative Form Letters 127,584 submitted by Consumer Energy Alliance

DERRICK SEAVER

July 6, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

I am writing to you today as someone who understands the burden of public decision-making, as well as someone who takes very seriously the well-being of our nation. It has been brought to my attention that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) will soon be deciding on Lease Sale 193. I would urge your support of this sale.

It was a great honor for me to serve in the Ohio House of Representatives for six years. For four of those six years, I sat on the Energy and Natural Resources Committee, Ohio, though an inland state, was responsible for the management of much of the Great Lakes system, a body of water that represents twenty-percent of our globe's fresh water. During my tenure, I was supportive of natural gas drilling in Lake Erie, a proposal that has been highly beneficial to our state's economy and energy sector.

As well as this has worked for my state, the reality of nature is that our waters do not possess the abundance of natural resources that Alaska's Outer Continental Shelf (OCS) possesses. It is believed that 30% of the world's undiscovered natural gas, and 13% of its undiscovered oil, are located there. It would be a shame for our nation not to utilize these precious natural resources. Lease Sale 193 has the potential to provide for the entire nation what drilling Lake Erie has done for Ohio: an increase in energy sector jobs, an increase in energy independence, and a decrease in rising energy costs.

I also remember clearly the pressure that one is put under when making these decisions. However, just as we used due diligence in Ohio, it appears to me that due diligence has been done on Lease Sale 193. The Environmental Impact Statement was positive; eighty-four OCS oil wells have gone without incident since 1971; and the public comment phase concludes on July 11. As a former representative of the people, I believe strongly in the right of citizens to speak on these issues, but upon completion of this process, I also believe strongly that you should take the appropriate action and approve Lease Sale 193.

I would like to thank you for taking the time to consider my opinion on this issue, and I would also like to thank you for the work you do. I realize it can often be thankless and exceedingly difficult. Ohio has shown the benefits of increased energy production, and I hope that you will approve Lease Sale 193 and allow these benefits to be realized nationwide.

Sincerely,

Honorable Derrick Seaver
Fmr. Member - Ohio House of Representatives

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JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MINERAL MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Representative Form Letters 127,584 submitted by Consumer Energy Alliance



Sailwinds Station
511 Maryland Ave
Cambridge MD 21613

July 6, 2011

Comments on the Revised Draft SEIS
Lease Sale 193 Chukchi Sea
c/o Regional Director James Kendall
BOEMRE - Alaska OCS
3801 Centerpoint Drive Ste. 500
Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

It has come to my attention that Lease Sale 193, which would allow for increased natural gas and oil drilling in the Chukchi Sea, will conclude its public comment period on July 11. I would ask that you approve the lease sale upon the completion of this process.

I am the owner of a local gas station, Sailwinds Station, in Cambridge, Maryland. As such, I am on the front lines of America's energy crisis. Every day I see the impact of reduced supply on the oil markets. It increases prices, frustrates my customers, and makes them less willing to purchase the fuel they need to operate their daily lives. Like all business owners, I already am dealing with the deep recession. Add in a reduced supply of my product, and the eventual outcome is the laying off of employees. Lease Sale 193 specifically, and oil and natural gas drilling in Alaska in general, could prevent this outcome.

It is an oft-quoted mantra that small business is the backbone of America. This is cliché, but it is also reality. The people hardest hit by the economic downturn are those small employers who get very little help from the government, but are also asked to pick up more and more of the burden. We operate small fleets of vehicles, purchase natural gas and heating oil for our homes and businesses, and in my case, sell the oil at the end of its production line. Lease Sale 193 provides the opportunity for you, as a person in authority, to assist small business owners while also enhancing our international standing.

The Department of Interior estimates that the Outer Continental Shelf (OCS) of Alaska possesses twenty-seven billion barrels of oil and one hundred thirty-two trillion cubic feet of natural gas. Alone it would be the eighth largest oil reserve in the world, ahead of Nigeria, Russia, Libya, and other areas we associate with heavy oil production. I understand that we already extract plenty of these resources, but in light of the fact that Lease Sale 193 has met all environmental and societal standards, I see no reason why this production should not be increased by this sale.

In closing, I would urge you to approve Lease Sale 193 to improve the economic situation of our smallest employers - those people who truly are the backbone of our economy. You are assuredly aware of the macro level benefits of this agreement. I would ask that you take even more seriously into consideration the micro level benefits, and keep us in mind when making this decision.

Sincerely,

Tim Miller
President, Sailwinds Station, LLC

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERAL MANAGEMENT SERVICE
ANCHORAGE, ALASKA

Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I appreciate all the additional steps the Bureau of Ocean Energy Management, Enforcement, and Regulation (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and I believe the revised Draft Supplemental Environmental Impact Statement (EIS) rightfully determines a very large oil spill remains highly unlikely. While I agree the BOEMRE needs to take all thoughtful precautions, I think this most recent EIS concludes that development of Alaska's offshore resources can proceed safely.

As the revised draft EIS states, a very large oil spill in the Chukchi is highly improbable given the history of exploratory drilling and well control incidents in the Outer Continental Shelf (OCS). Since 1971, 84 wells have been drilled in the Alaska region alone, all without incident. Moreover, the proposed drilling in the Chukchi would occur in waters similar in depth to the shallow-waters in the Gulf of Mexico, which boasts a long history of safe operations. The *Deepwater Horizon* blowout and resulting very large oil spill in the Gulf of Mexico, conversely, was the first incident of this magnitude in nearly 40 years of OCS exploration.

Notwithstanding, producers and regulators have made significant investments – both in time and resources – to ensure all drilling proceeds in the safest manner possible. Pursuant to the Notice to Lessees 06, producers were required to reassess the potential impacts of a worst-case discharge. As such, Shell revised its exploratory plan for the Chukchi Sea using calculations of spill estimates based on the known geology of the basin and has since determined that the company maintains the capacities needed to prevent a blowout and respond swiftly and effectively in the unlikely event a blowout occurs.

The revised supplemental EIS notes that since 1979, for every 130 billion barrels of oil produced, one well incident resulting in a very large oil spill has occurred – though one-third of these spills have been the result of military action. Clearly, the probability of a well incident is very low, even if some risk exists. Given the economic and energy security benefits of increased domestic oil production, I believe this minimal risk is acceptable, particularly because of the advanced response capabilities in place.

I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Sincerely,

Joy Hardacre
P.O. Box 917
New Castle, IN 47362

Representative Form Letters 127,584 submitted by Consumer Energy Alliance

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska's Outer Continental Shelf would have a tremendous ripple effect throughout the nation's economy – creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska's OCS are significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide with a cumulative payroll of \$154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 15,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Alaska's Outer Continental Shelf.

Sincerely,

Theresa Lussi
156 Glen Eaton Dr.
Pagosa Springs, CO 81147

Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011

James Kendall, Regional Director
Alaska OCS Region, Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS for Lease Sale 193

Dear Mr. Kendall:

I am writing today to encourage you to finalize the environmental review process for Lease Sale 193 as expeditiously as possible and allow for oil and natural gas development in the Chukchi Sea to proceed.

I appreciate the extensive efforts the Bureau of Ocean Energy Management, Enforcement, and Regulation has taken to ensure appropriate changes to offshore processes and regulations are made so that we are better prepared in the unlikely event of a future oil spill. Lease Sale 193 has undergone a thorough, exhaustive environmental review, and it is clear that safe exploration and production can occur in the Chukchi Sea. Both regulators and operators in the region have undertaken extraordinary efforts to augment their blowout prevention and spill response capabilities if an incident were ever to occur.

While I applaud all of these noteworthy precautions, I believe the Revised Draft Supplemental Environmental Impact Statement (SEIS) rightfully concludes that the probability of a very large oil spill is very low. Moreover, the proposed drilling depths in the Chukchi Sea are similar to that of shallow-water operations that have occurred safely in the U.S. Gulf of Mexico for decades. In these shallower waters, the blowout preventer is more easily accessible and will not likely experience the challenges present during the *Deepwater Horizon* blowout in 2010.

Finally, if a discharge were to occur, the anticipated spill volumes in the Chukchi Sea would be much lower than the values used in the BOEMRE's hypothetical analysis. In accordance with the Notice to Lessees 06, Shell Gulf of Mexico Inc./Shell Offshore Inc. revised its anticipated spill impacts in its exploration plan for the Chukchi and concluded that the company maintains capabilities that meet or exceed the standards for blowout prevention and spill response.

I appreciate the opportunity to comment today, and I applaud the Obama Administration's efforts to ensure offshore energy development proceeds in the safest manner possible. Following the conclusion of this last iteration of the SEIS, I urge the BOEMRE to finalize the review process and allow the exploration of the Alaska OCS.

Sincerely,

Glenda WOLFE
39602 Walnut Dr
Pearl River, LA 70452

Representative Form Letters 127,584 submitted by Consumer Energy Alliance

July 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Re: Revised Draft Supplemental Environmental Impact Statement – Lease Sale 193

Dear Mr. Kendall:

As you know, energy production is a key driver of the American and Alaskan economies. At the same time, energy remains one of the top expenses for American businesses and individual consumers. This cost has been driven up substantially by many factors in recent months, including overseas volatility in the Middle East and stalled offshore production in the United States. Compounding these problems, the natural decline in onshore production in Alaska jeopardizes the longevity of the Trans-Alaska Pipeline, which is already running at one-third of its capacity. With abundant resources offshore, Alaska is an obvious place for the United States to augment its production to meet domestic demand.

With global supply of oil increasingly strained, price volatility will continue to cause hardship for many American businesses and families. While the United States cannot completely insulate itself from the global economy, there are actions we can take to bolster our energy security and provide positive signals to the market. Moving forward with development of our abundant OCS resources is one such measure that will provide relief to American consumers now and in the future.

The federal government estimates that the Chukchi and Beaufort Seas contain approximately 25 billion barrels of oil and 130 trillion cubic feet of gas. With current U.S. daily consumption over 19 million barrels, these resources are equivalent to over three and a half years of U.S. demand. Furthermore, bringing these Alaskan OCS resources online would decrease foreign imports, helping to lessen the influence countries like Saudi Arabia, Libya and Venezuela have on the United States and on global oil markets. Finally, if the United States were to produce these domestic resources, trillions of dollars would remain in the United States increasing our burgeoning trade deficit.

Given the tremendous impact Alaskan OCS development can have for our economic and energy security outlook, it is imperative that BOEMRE proceed with Lease Sale 193 in a timely manner.

Sincerely,

ROBERT SALASEK
1509 BENTON ST
MOUNTAIN HOME, AR 72653

July 2011

July 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

Dear Mr. Kendall:

I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

I appreciate all the additional steps the Bureau of Ocean Energy Management, Enforcement, and Regulation (BOEMRE) has taken to assess the risk of drilling in the Chukchi Sea, and I believe the revised Draft Supplemental Environmental Impact Statement (EIS) rightfully determines a very large oil spill remains highly unlikely. While I agree the BOEMRE needs to take all thoughtful precautions, I think this most recent EIS concludes that development of Alaska's offshore resources can proceed safely.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

As the revised draft EIS states, a very large oil spill in the Chukchi is highly improbable given the history of exploratory drilling and well control incidents in the Outer Continental Shelf (OCS). Since 1971, 84 wells have been drilled in the Alaska region alone, all without incident. Moreover, the proposed drilling in the Chukchi would occur in waters similar in depth to the shallow-waters in the Gulf of Mexico, which boasts a long history of safe operations. The *Deepwater Horizon* blowout and resulting very large oil spill in the Gulf of Mexico, conversely, was the first incident of this magnitude in nearly 40 years of OCS exploration.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

Notwithstanding, producers and regulators have made significant investments – both in time and resources – to ensure all drilling proceeds in the safest manner possible. Pursuant to the Notice to Lessees 06, producers were required to reassess the potential impacts of a worst-case discharge. As such, Shell revised its exploratory plan for the Chukchi Sea using calculations of spill estimates based on the known geology of the basin and has since determined that the company maintains the capacities needed to prevent a blowout and respond swiftly and effectively in the unlikely event a blowout occurs.

In conclusion, I believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

The revised supplemental EIS notes that since 1979, for every 130 billion barrels of oil produced, one well incident resulting in a very large oil spill has occurred – though one-third of these spills have been the result of military action. Clearly, the probability of a well incident is very low, even if some risk exists. Given the economic and energy security benefits of increased domestic oil production, I believe this minimal risk is acceptable, particularly because of the advanced response capabilities in place.

Sincerely,

I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Norman Newsome
8312 Mule Deer Road
Gilmer, TX 75644

Sincerely,

Pam Blake-Caslin
615 Travis St
Liberty, TX 77575

Page 1 of 1

Page 1 of 1

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 06, 2011
Status: Posted
Posted: July 06, 2011
Tracking No. 80eba33b
Comments Due: July 11, 2011
Submission Type: Web

PUBLIC SUBMISSION

As of: July 25, 2011
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Posted: July 01, 2011
Tracking No. 80eb6fb3
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0020
Comment from Sean Cochrane, Individual

Document: BOEM-2011-0044-0009
Comment from John Cookson, Self

Submitter Information

Submitter Information

Name: Sean Cochrane
Address:
5820 Beverly Dr
Anchorage, AK, 99516
Email: s_p_cochrane@hotmail.com
Organization: Individual

Name: John Cookson
Address:
20442 Williamsburg Dr.
Eagle River, AK, 99577
Email: cookson@gci.net
Organization: Self

General Comment

General Comment

I write to support the adoption of the Supplementary Environmental Impact Statement on Oil and Gas Lease Sale 193. The SEIS provides the Secretary with sufficient information and analyses to make an informed decision to affirm Sale 193. Contrary to what some may assert, there has already been oil and gas exploration and development in the US Arctic Ocean. In fact, since the 1980's some 35 wells have been drilled without incident including five in the Chukchi. These wells are also significantly different in nature than those in the deepwater Gulf of Mexico as it relates to depth, pressure and temperature. I am a concerned Alaskan who believes that study of this issue has gone on too long. The time for endless process has passed. An effort to rescind these leases will effectively result in a moratorium which is inconsistent with federal policy and the needs of Alaskans and Americans. The exploration and development of America's oil and gas resources are critical to Alaska's future economy and the nation's long-term energy security.

I encourage Secretary Salazar, the BOEMRE and other regulating officials to promptly affirm Oil and Gas Lease Sale 193, Chukchi Sea. Development of our offshore resources, including the Chukchi leases, is critical to our national prosperity and security. The Deepwater Horizon incident has greatly heightened sensitivities to the risks of a very large oil spill (VLOS). However, it must be recognized that the risks of a VLOS in the Chukchi are significantly lower than in the deepwater Gulf of Mexico due to the much shallower water depth and lower reservoir pressure.

Thank you for your consideration of this matter.

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
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 Tracking No. 80ec0230
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0135
 Comment from Richard Coose, individual

Submitter Information

Name: Richard Coose
Address:
 PO Box 9533
 Ketchikan, AK, 99901
Email: rcoose@kpnunet.net
Organization: individual

General Comment

July 11, 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea
 Dear Mr. Kendall,
 I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a complete analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been

reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

America has for long relied on foreign oil while we have it here at home. The federal government by stopping the exploration and utilization of USA owned and controled does unnecessarily cause high petroleum prices.

Now is the time to start using some common sense and move forward on this project.

I appreciate the opportunity to comment on this important matter, and I urge the BOEMRE to move forward with this process to allow the safe production of these resources.

Sincerely,

Richard L. Coose

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file:///C:/Documents and Settings/BENEDETD/Local Settings/Temp/wzd1e3/Document Li... 7/27/2011

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 04, 2011
 Status: Posted
 Posted: July 05, 2011
 Tracking No. 80eb9380
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0015
 Comment from Billie Corbin, none

Submitter Information

Name: Billie Corbin
Address:
 3411 Cobblestone Creek
 Houston, TX, 77084
Email: billie_corbin@hotmail.com
Phone: 281-620-7145
Organization: none
Government Agency Type: Federal
Government Agency: BOEM

General Comment

Considering the impact of high energy prices that affect each American and our economy, the United States has an obligation to develop domestic energy sources. Demand continues to rise and our country needs to continue to develop the resources we have. Lease 193 should be affirmed as held in 2008. There is sufficient information and analysis to support an informed decision affirming Sale 193. If the leases are rescinded, it will, no doubt, harm Alaska's economy, as well as the rest of the country's.

The Chukchi OCS is an important future source of energy. Lease Sale 193 has the potential to refill the alaska oil pipeline and produce much needed energy and jobs.

The industry has committed to preventing spills that are beyond legal requirements. The wells in Alaska would be in very shallow water where pressures are much lower than in deep water drilling, thus lowering risk. All current wells in Alaska were drilled without incident, even though most were drilled using 1980's technology.

It is my belief that the Lease Sale 193 should be affirmed.

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebfb3a
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0059
 Comment from Deantha Crockett, personal

Submitter Information

Name: Deantha Crockett
Address:
 11431 Cobra St
 Anchorage, AK, 99507
Email: dcrockett@gci.net
Phone: 9073176323
Organization: personal

General Comment

Please affirm Lease sale 193 as held in 2008. It is vitally important to Alaska and the nation's economy.

Industry has gone above and beyond to implement environmental protections. There is NO reason not to move forward in the OCS.

I say this as a 30-year resident of Alaska. I SUPPORT OCS development.

Thank you!

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file:///C:/Documents and Settings/BENEDETD/Local Settings/Temp/wzb0a7/Document Li... 7/27/2011

Representative Form Letters of 15,047 submitted by EARTHJUSTICE

Sidney Stetson
Northfield, VT 05663-5738
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

If they can prove they have the technology and capability of stopping a deep-water oil leak within 48 hours after it begins, then they may drill at that depth. Simple. The Bureau of Ocean Energy Management, Regulation, and Enforcement and the Department of the Interior are currently making important decisions about the Arctic Ocean that threaten long-term consequences for the region. BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort seas starting in 2012 and revisions to the accompanying oil spill response plans. It is too soon to permit oil and gas activities in the Arctic Ocean. BOEMRE and Interior should not reaffirm the Chukchi Sea leases and should not approve Shell's plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis and before realistic and effective plans to respond to a large oil spill are put in place. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. Until BOEMRE has conducted a thorough scientific analysis about the effects of oil and gas activities on fish, birds, and marine mammals, leases in the Chukchi Sea should not be affirmed and oil drilling should not proceed. There is far too much at risk: the Arctic Ocean is a pristine, remote region, home to many threatened and endangered species, including bowhead whales, polar bears, walrus, seals and much more. This region is also of great significance to Alaska Native communities which rely on the bounty of the Arctic Ocean to sustain their thousands year old way of life. BOEMRE's own analysis shows that very large oil spills could occur from drilling in the Chukchi Sea. An oil spill would have catastrophic effects on species and communities in the region. The oil spill in the Gulf of Mexico taught us that preparation is key. Shell Oil Co.'s oil spill prevention plan for the Chukchi Sea is wholly inadequate. It is based on flawed and unrealistic assumptions. The Coast Guard and other agencies agree -- we are woefully unprepared to respond to a large oil spill in the Arctic Ocean were one to occur. It is also beyond dispute that many basic questions about the Arctic Ocean ecosystem remain unanswered. There is much more that must be understood in this remote area -- through a comprehensive research and synthesis plan -- before leasing and drilling can be allowed to proceed. Without this basic information, we cannot know the potential consequences of oil development there and we cannot manage those activities in a way that protects the people and resources of the region, particularly in the face of ever growing climate change threats. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean.

Sincerely,

Sidney Stetson

Representative Form Letters of 15,047 submitted by EARTHJUSTICE

Lois Braun
Saint Paul, MN 55108-2003
July 4, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. Just a year ago we witnessed a devastating oil spill in the Gulf of Mexico. If a spill was that difficult to contain in the warm waters of the Gulf, how much more difficult might a spill in the cold icy waters of the Arctic be? It is not worth the risk, considering the many threatened and endangered species that make the Arctic their home, and considering the Alaska Native communities who's thousands of years old way-of-life would be endangered if the ecosystems upon which they depend is damaged. It is especially not worth the risk considering that the future of the world depends on our stopping climate change by getting off oil. Why risk so much to feed an addiction that is killing us? It is time to say "no" to drilling in the Arctic, as well as to offshore drilling elsewhere, and to redirect the resources we expend on oil and gas extraction into developing renewable non-polluting alternatives.

Sincerely,

Lois Braun

Representative Form Letters of 15,047 submitted by EARTHJUSTICE

gerry lamanski
Tempe, AZ 85285-7927
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

No drilling until these corporations can without a doubt --contain any spills or be able to leave no footprint. The world is watching. If they drill now and spills due occur --it is without a doubt in my mind that as a species ourselves we don't care about anything in this world but us--damn the planet and its wonderfulness. Why dont we push alternative energies now for our use here in the US, use up other countries oil first then we will literally have black gold under our feet and will maintain our dominance in the marketplace and ensure our survival.

Sincerely,

gerry lamanski

Representative Form Letters of 15,047 submitted by EARTHJUSTICE

Penny Wild-Perkowski
Pequannock, NJ 07440-1124
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

After the BP disaster, it is clear that there isn't the knowledge needed to react to another similar catastrophe in the ocean. We can't afford to make these mistakes any longer. We depend on the health of the planet, and the planet depends on us to care for it. The Bureau of Ocean Energy Management, Regulation, and Enforcement and the Department of the Interior are currently making important decisions about the Arctic Ocean that threaten long-term consequences for the region. BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort seas starting in 2012 and revisions to the accompanying oil spill response plans. It is too soon to permit oil and gas activities in the Arctic Ocean. BOEMRE and Interior should not reaffirm the Chukchi Sea leases and should not approve Shell's plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis and before realistic and effective plans to respond to a large oil spill are put in place. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. Until BOEMRE has conducted a thorough scientific analysis about the effects of oil and gas activities on fish, birds, and marine mammals, leases in the Chukchi Sea should not be affirmed and oil drilling should not proceed. There is far too much at risk: the Arctic Ocean is a pristine, remote region, home to many threatened and endangered species, including bowhead whales, polar bears, walrus, seals and much more. This region is also of great significance to Alaska Native communities which rely on the bounty of the Arctic Ocean to sustain their thousands year old way of life. BOEMRE's own analysis shows that very large oil spills could occur from drilling in the Chukchi Sea. An oil spill would have catastrophic effects on species and communities in the region. The oil spill in the Gulf of Mexico taught us that preparation is key. Shell Oil Co.'s oil spill prevention plan for the Chukchi Sea is wholly inadequate. It is based on flawed and unrealistic assumptions. The Coast Guard and other agencies agree -- we are woefully unprepared to respond to a large oil spill in the Arctic Ocean were one to occur. It is also beyond dispute that many basic questions about the Arctic Ocean ecosystem remain unanswered. There is much more that must be understood in this remote area -- through a comprehensive research and synthesis plan -- before leasing and drilling can be allowed to proceed. Without this basic information, we cannot know the potential consequences of oil development there and we cannot manage those activities in a way that protects the people and resources of the region, particularly in the face of ever growing climate change threats. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean.

Sincerely,

Penny Wild-Perkowski

Jeris Turner
Oxnard, CA 93036-8809
July 3, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

To drill anywhere in the Arctic would be catastrophic. Offshore drilling is an enormous risk. The explosion of Deep Horizon was a foregone conclusion. The question was never IF it would happen, the question was WHEN. Just as it was inevitable that there would be a nuclear meltdown sooner or later, it is inevitable that if we are foolish enough to let anyone drill in the Arctic, an accident will inevitably happen. Oil companies don't mind taking risks, because they are all about profit, keeping us dependent on fossil fuels, and they don't care what they destroy. That is not true of the rest of us. Most of us want to leave behind a world fit for our children and their children to live in. Please discard this insane idea.

Sincerely,

Jeris Turner

Stephen Sleeper
Bonita Springs, FL 34135-7623
July 2, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement, Alaska OCS Region,
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea: Arctic Ocean Oil Drilling is a Bad Idea

Dear Bureau of Ocean Energy Management, Regulation, and Enforcement,

The Bureau of Ocean Energy Management, Regulation, and Enforcement and the Department of the Interior are currently making important decisions about the Arctic Ocean that threaten long-term consequences for the region. BOEMRE is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort seas starting in 2012 and revisions to the accompanying oil spill response plans. It is too soon to permit oil and gas activities in the Arctic Ocean. BOEMRE and Interior should not reaffirm the Chukchi Sea leases and should not approve Shell's plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis and before realistic and effective plans to respond to a large oil spill are put in place. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. Until BOEMRE has conducted a thorough scientific analysis about the effects of oil and gas activities on fish, birds, and marine mammals, leases in the Chukchi Sea should not be affirmed and oil drilling should not proceed. There is far too much at risk: the Arctic Ocean is a pristine, remote region, home to many threatened and endangered species, including bowhead whales, polar bears, walruses, seals and much more. This region is also of great significance to Alaska Native communities which rely on the bounty of the Arctic Ocean to sustain their thousands year old way of life. BOEMRE's own analysis shows that very large oil spills could occur from drilling in the Chukchi Sea. An oil spill would have catastrophic effects on species and communities in the region. The oil spill in the Gulf of Mexico taught us that preparation is key. Shell Oil Co.'s oil spill prevention plan for the Chukchi Sea is wholly inadequate. It is based on flawed and unrealistic assumptions. The Coast Guard and other agencies agree - we are woefully unprepared to respond to a large oil spill in the Arctic Ocean were one to occur. It is also beyond dispute that many basic questions about the Arctic Ocean ecosystem remain unanswered. There is much more that must be understood in this remote area - through a comprehensive research and synthesis plan - before leasing and drilling can be allowed to proceed. Without this basic information, we cannot know the potential consequences of oil development there and we cannot manage those activities in a way that protects the people and resources of the region, particularly in the face of ever growing climate change threats. I urge you to not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. NO DRILLING !!! Your agency is supposed to protect THE PEOPLE from egregious attempts by greedy corporations to further exploit the people of this country and OUR natural resources. No more...END CORPORATE RULE !!!

Sincerely,

Stephen Sleeper

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
Status: Posted
Posted: July 11, 2011
Tracking No. 80ebece3
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0046
Comment from Ilona Farr, self

Submitter Information

Name: Ilona Farr
Address:
3945 Geneva Place
Anchorage, AK, 99508
Email: afmc4045@yahoo.com
Phone: 907-561-7020
Organization: self
Government Agency Type: Local
Government Agency: Voter and Alaskan resident

General Comment

Please allow development of the outer continental shelf of Alaska. The oil and gas companies in Alaska have done a good job to date of developing our resources in a responsible manner. The development of these resources has led to clean water, good housing, energy, the development of roads and schools for all of us here in the state. The companies have followed state, local, and federal laws and done a good job of protecting the environment. If the state and companies feel that these resources can be developed safely, and permit review by all the agencies is within guidelines, then they should be allowed to develop these leases they have bought in good faith.

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
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Posted: July 11, 2011
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Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0063
Comment from John Fisher, Myself

Submitter Information

Name: John Fisher
Address:
3310 Starboard Ln
Anchorage, AK, 99516
Email: jfisher215@gmail.com
Phone: 907-223-6344
Organization: Myself
Government Agency Type: Federal
Government Agency: BOEM

General Comment

"I urge you to adopt the Supplement Environmental Impact Statement (SEIS) and reaffirm Chukchi Sea Oil and Gas Lease Sale 193. As an Alaskan, I support the development of Alaska's Outer Continental Shelf. The SEIS is just for the lease sale only, which authorizes a lessee to engage only in "ancillary activities" that do not harm the environment. The lease holders have been waiting for over three years since the historic lease sale in 2008 to explore and hopefully develop these leases. But before any exploration, development or production activities can occur, further environmental review and approval will be required.

Alaskans have and continue to support the development of our state's OCS as it is not only vital to our economy and the continued operation of the Trans-Alaska Pipeline System, but it is important for our nation's energy security. Alaska's OCS is estimated to hold 27 billion barrels of oil and 132 trillion cubic feet of natural gas. That could fuel 25 million cars for 35 years. Alaska's North Slope region has already produced 16 billion barrels of oil in the last 34 years, so the OCS really could fuel Alaska's economy and provided much needed energy for the nation for decades.

Again, please adopt the SEIS and reaffirm Lease Sale 193."

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: June 24, 2011
 Status: Posted
 Posted: July 01, 2011
 Tracking No. 80eb36b8
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0005
 Comment from Mishal Tooyak Gaede, concerned indigenous Alaskan

Submitter Information

Name: Mishal Tooyak Gaede
Address:
 P O Box 81188
 Fairbanks, AK, 99708
Email: mishalgaede@yahoo.com
Organization: concerned indigenous Alaskan
Government Agency: Tribal member of Native Village of Point Hope

General Comment

I am against exploratory drilling, or any type of drilling for Oil in the Chukchi Sea. I am Inupiat, an enrolled tribal member of the Native Village of Point Hope. My people have survived and thrived for centuries here in the Arctic. Anthropologists believe it is one of the oldest continually inhabited places in North America. Why? Point Hope is on a peninsula that juts out into the Chukchi Sea; it is rich in marine life, such as Bow head whales, bearded seals, polar bears, arctic fox, walrus and many more animals. Our ancestors have survived for centuries in the most extreme arctic environment. This did not happen by chance. As Patrick Attungana, a respected whaling captain once said: our blood is mixed with that of the animals, with the bowhead whales. Point Hope is a complex whaling society. Our identity and our social and cultural laws and customs are derived from the lands, our waters, the animals, the fish and the birds. All of this knowledge has been handed down orally through generation after generation. It is very hard to fathom, to even wrap one's brain around what it actually means to be out on the ice on the Chukchi Sea; survival is paramount. The currents, the weather conditions, the ice and the extreme force and power of the elements can never be underestimated. I do not care what sort of "technology" Shell Oil or any oil company thinks they have, it is no match for mother nature. Drill where it is safer, on land. Thank You

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moral obligation to develop all types of domestic energy sources especially oil and gas.
 Again I urge you to affirm the Lease Sale 193
 Respectfully
 Kevin Greenfield

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PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ebff78
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0105
 Comment from Kevin Greenfield, myself

Submitter Information

Name: Kevin Greenfield
Address:
 13315 Glen Alps Rd
 Anchorage, AK, 99516
Email: kgreenfield@taigaming.com
Organization: myself

General Comment

Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

Regional Director

I urge you to affirm the lease sale 193.
 Oil and gas development is critical to our Nations energy security.
 By affirming this sale you could help create 54,000 new Alaskan jobs for the next 50 years.
 Alaska has some of the worlds highest safety and environmental standards.
 These outer continental shelves have been drilled before in the 1980 with old technologies with out incident.
 The impact the high oil prices have on the nation's poor and less fortunate people is an important factor that is often disregarded by the environmental attorneys lobbying to stop all OCS oil development. I believe drilling in Alaska's OCS will help stabilize oil prices. It is our nation's

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Representative of Form Letters 30,124 from Individuals (Greenpeace)

Mrs. Patricia Benward
 1526 Windrew Ave
 South Plainfield, NJ 07080-1518

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. There is no way to doil a polar bear. Should a spill occur, and we know it can, you are giving a death sentence to these creatures. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
 Mrs. Patricia Benward

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Chris Celine
1262 Old Willow Ln
Ashland, OR 97520-1341

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Ms. Chris Celine

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Mr. j m
1 NW 1
MAIMI, FL 33139

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America's Arctic Ocean may be decided this summer. DEATH BY GREED, OR LIFE BY LOVE.

I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions. AS WELL AS PAST PERFORMANCE FROM THE OIL INDUSTRY WITH EVEN THE SMALLEST OF LEAKS.

The Arctic's rich marine environment is the least understood area in the world. AS IS THE DRILLING INDUSTRY'S SAFETY PRACTICES.

There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. THERE IS ALSO A BASIC LACK OF COMPOSURE FROM THE OIL INDUSTRY TO EXPLOIT THESE LANDS FOR PRIVATE PROFIT.

The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem. THUS BURGEONING THE EFFORTS TO SAVE OUR PLANET'S DEMISE.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. THIS SAYS NOTHING ABOUT THE SMALL SPILLS THAT AREN'T REPORTED, ARE UNDER-REPORTED OR ARE TAKEN AS PART OF "DOING BUSINESS".

As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling. THERE ARE MANY OTHER PLACES ALREADY APPROVED FOR OIL DRILLING THAT ARE LAYING UNTAPPED.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Heather Larkin Vogler
250 Bandy Rd
Ashland City, TN 37015-4701

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Ms. Heather Larkin Vogler

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Cynthia Britt
1490 Blair Loop Rd
Danville, VA 24541-5007

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

NO MORE. Oil is not the answer so please stop destroying nature pretending it is, while we have wind fields producing more than can be used. No more, when they do not even properly maintain what they have.

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Ms. Cynthia Britt

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Mr. Stewart Faulkner
Branty
46600 Sarrazac
France, None 46600

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of the planet's Arctic Ocean may be adversely decided this summer.

I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's undoubtedly rich marine environment is one of the least understood area in the world. There is a lack of basic science ranging from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems.

The Department of Interior (DOI) must not and should not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

BOEMRE, as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. If this alone was not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

I would further add to this the deplorable track record and attitude demonstrated over many years by Shell in the Niger Delta.

The Inupiat people, who have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations. It is also part of the world's ocean garden - when will brute common sense prevail?

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these unique waters. There is too much at stake.

Sincerely,
Mr. Stewart Faulkner

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Robin Whitely
46 Colonial Way
Short Hills, NJ 07078-1813

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I SUBSCRIBE TO AND SUPPORT THIS STATEMENT BY GREENPEACE. OIL IS NOT THE LONG TERM ANSWER TO OUR ENERGY NEEDS. WE CANNOT CONTINUE TO GAMBLE WITH DELICATE ECOSYSTEMS. PLEASE DIRECT AMERICA'S ENERGY EFFORTS TOWARD TRULY SUSTAINABLE ENERGY RESOURCES.

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Robin Whitely

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Pete Donnelly
1481 Mt Highway 209
Bigfork, MT 59911-6536

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

I have worked as a roughneck and even if a disastrous spill didn't occur there is no denying that drilling rigs have a large detrimental impact on their environment.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Pete Donnelly

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Mr. rik williams
PO Box 72221
Fairbanks, AK 99707-2221

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I have lived and worked in the arctic for the past 36 years and know that much of it is no longer pristine because of oil exploration and development. I have tried to clean up oil spills there and know it is very difficult to impossible. therefore i request that any massive drilling effort, like the shell proposal be denied until the industry develops a technology and procedure that can be effective for clean up because spills are unavoidable apparentlyl. The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

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As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ms. Sidney Stetson
1069 S Main St
Northfield, VT 05663-5738
(802) 485-8588

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

We've sacrificed too much of the environment to drilling and mining, as it is. When oil companies can PROVE they have the capability of stopping a spill at a given depth within 48 hours of its occurrence, maybe then we could reconsider allowing them to drill. Until then, no dice.

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations.

Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Sincerely,
Ms. Sidney Stetson

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Mr. Kyle Emblar
662 Mercer St SE
Atlanta, GA 30312-3520

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Within the past year we've encountered catastrophic damage to the Gulf of Mexico, numerous Alaska spills and now another Exxon oil spill in the pristine Yellowstone river and surrounding area. It is hard to fathom why we are even considering permitting BIG OIL interests and greed to risk damaging the Arctic Ocean. The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

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Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

PROTECT ALL AMERICAN Citizens and the unspoiled beauty of the Arctic

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Ocean. Do NOT bow or cave to pressure from the GOP and worse, BIG OIL. Do the morally right thing by saying no. Future generations of AMERICANS including your children will thank you!

Sincerely,

Kyle Emblar
662 Mercer Street SE
Atlanta, GA 30312

Sincerely,
Mr. Kyle Emblar

Representative of Form Letters 30,124 from Individuals (Greenpeace)

Dr. Isa Lottes
1000 Hilltop Cir
Baltimore, MD 21250-0001

Jul 7, 2011

James Kendall

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

It is very important that no drilling be allowed in the Arctic. The oceans of the world are already harmed enough by the activities of man.

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no drilling is permitted in Arctic waters given the lack of essential information on the ecosystem and technology to clean up a spill in the Arctic's unique conditions.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has critical missing information, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.

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Secretary Salazar, please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Dr. Isa Lottes

As of: July 25, 2011
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PUBLIC SUBMISSION

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0129
Comment from William Hawley, Individual

Submitter Information

Name: William Hawley
Address:
PO Box 110838
Anchorage, AK, 99511
Email: ted.hawley.ak@gmail.com
Phone: 907.223.7621
Organization: Individual

General Comment

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Setting a precedent of halting projects after they have gone through the NEPA process will show industry and the world that the US does not understand or respect it's own environmental process - one of the most rigorous in the world.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- New offshore oil and gas development in Alaska would generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance. \$82 billion in payroll would be paid to employees in the Lower 48.
- Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.

Regional Director, BOEMRE ALASKA OCS Region,

The Chukchi Sea is a place of immeasurable value. It is valuable as a home for endangered polar bears, walrus, seals, fish and cycles of aquatic life. It is valuable as the ancestral homeland of the Inupiat people who have been living in this place for centuries before Western scientists discovered that the earth was round. It is valuable in ways that we simply cannot conjecture about at this point. These values are the kind that will last forever, if we are wise enough to protect them.

To grant Shell Gulf of Mexico, inc. a free pass to wreak havoc in our fragile Arctic Oceans with their current inadequate plan would be intolerably irresponsible. The revised Draft SEIS does not remedy the missing information that made the first draft so flawed.

With our oceans, we must at least have the humility and wisdom to know and admit how little we know. Shell openly admits that there is not enough basic scientific information about the Arctic - from simple species counts of marine and coastal fish and marine mammals such as walrus to information about currents and tidal systems - to fully understand the potential impacts of development to this already imperiled place. Without this vital information, how can Shell possibly make intelligent decisions regarding our common waters?

I am very concerned about the possibility of a major oil spill in the Chukchi Sea if Shell is allowed to drill. If the corporation can't manage to clean up a spill in the Gulf of Mexico, there is no way they can deal with the Arctic Ocean they now threaten with development. Shell's plans for cleaning up a spill in a region characterized by extreme cold, extended periods of darkness, hurricane-strength storms and pervasive fog include glorified mops and buckets. To make matters worse, the nearest coast guard station is 1,000 miles away!

I urge you to hold off decisions about drilling in America's Arctic Ocean until there is a plan that gathers and synthesizes adequate baseline ecological information basic essential information and the technology exists to clean up an oil spill in the Arctic Ocean's extreme conditions. Please mandate more environmental including the impacts from a potential blowout oil spill during the proposed drilling. Please mandate MMS to fill in the data gaps and work with agencies like NMFS and USGS to obtain information about the Arctic Ocean. The way it stands, the Chukchi Sea Lease Sale 193 is not a risk America can afford to take. Please protect our land and sea from corporate haste and greed.

With trust and hope,

Jenna Hertz

Richard A. Hughes Comment

318 Juneau Ave.
Fairbanks, AK 99701-3768
(907) 347-1521, email: rahughes@gci.net
July 8, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation & Enforcement
3801 Centerpoint Drive, Ste. 500
Anchorage, AK 99503

Dear Mr. Kendall:

This is to provide comments relative to the proposed Outer Continental Lease Sale 193 in the Chukchi Sea. I support this sale and encourage you to move forward as soon as conceivably possible to enable this lease. The draft EIS has been reworked in compliance with US District Court order to include a "worst case" oil spill scenario. Considerable information is now included to make an informed decision. I would like to add certain comments in support of my position:

- Lease Sale 193 should be affirmed as held in 2008; the SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without an corresponding benefit to the environment
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security
- The Chukchi OCS is an important future source of US energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place; the Chukchi Sea is considered the most prospective unexplored offshore basin in the country
- The goal of Lease Sale 193 is to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits; the OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards; activities will be governed by stringent lease stipulations; numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities
- Industry has committed to unprecedented provisions from prevention and spill response that go above and beyond what is required by law; these provisions, combined with a stringent

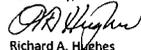
Richard A. Hughes Comment

permitting process, give Alaskans a high level of confidence that exploration and development can occur safely

- Drilling in the Arctic offers distinct differences than deep water exploration and development in the Gulf of Mexico; the pressure encountered in deep water drilling is multiple times greater than in Alaska where wells would be in very shallow water; there are also major differences in well designs, as well as fundamental differences in the geology of the regions
- Thirty exploration wells have been drilled in the Beaufort and five in the Chukchi - all without incident; these wells were drilled in the 1980's, utilizing older technology compared to what exists today
- The North Slope and the offshore are now one of the most studied energy basins in America; in the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas
- An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska; as estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout the US - in manufacturing, computer technology, construction and maintenance; \$82 billion in payroll would be paid to employees in the Lower 48
- Federal, state and local governments would all realize substantial revenue from OCS development, with the base case totaling \$193 billion, of which the federal government would collect \$167 billion
- Demand for energy is continuing to rise and the US requires continued development of America's oil and gas resources as the nation transitions to alternative energy sources of the future
- Given the impact of high energy prices on Americans and their economy, the US has an obligation to develop domestic oil and natural gas sources, both onshore and offshore.

Thank you for your consideration.

Yours truly,


Richard A. Hughes

Representative of Form Letter Campaign to Congress over 1,000 received

Wednesday, July 06, 2011

The Honorable Representative Pete Visclosky
2256 Rayburn House Office Building
Washington, DC 20515

Subject: Urge the Administration to Allow more Oil Production

Representative Visclosky:

June 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Dear Mr. Kendall:

I write to express my strong support for energy development from Alaska from federal lands and waters, and specifically, to urge your agency to do what is necessary to move forward with Lease Sale 193 in the Chukchi Sea.

Now that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has revised its analysis of the environmental information surrounding offshore energy development in Alaska, I am convinced that operations in Alaska's OCS can proceed in much the same way that operations are proceeding throughout the world where countries recognize that oil and gas are essential to economic growth and a strong economy. I hope that BOEMRE shares my belief that a strong America with opportunities for future generations requires that Alaska's resources not be placed off limits, as some have urged. We need jobs, and Alaska's energy will help.

I was very surprised to recently learn that less than 3% of America's OCS is leased for energy production, and that includes the leases in question in Alaska. It seems to me that if the government is truly concerned about job creation and economic growth, it will follow through on those few areas that have been leased like the Chukchi Sea and allow those who have already paid the government for the right to explore the opportunity to explore. By some accounts, expected production of oil from Alaska's OCS could create over 50,000 jobs. Additionally, any oil found and produced would help fill the Trans-Alaska Pipeline System (TAPS) that is running at below one-third of its capacity. The 1.5 million+ barrels



Representative of Form Letter Campaign to Congress over 1,000 received

of oil that the US must import every day to replace oil that was once transported through TAPS costs our nation over \$50 Billion per year at today's prices, and is more oil than Libya exported daily before its exports were cut off. As you know, the loss of that oil on world markets was sufficient to compel President Obama to release our strategic petroleum reserves, even while the US could transport more than that daily to our markets but for delays and lack of permits. The US needs more energy in its most important oil pipeline, and no other nation on earth would neglect such an energy asset if it had oil available to refill it.

The United States needs more energy; it needs more jobs; it needs more federal revenue. You have it within your power to ensure the United States gets what it needs to make us stronger. I ask that you make the right decision and allow Alaska's energy resources to contribute to that strength.

Sincerely,

Arline Seeman
9331 Olcott Ave
Saint John, IN 46373

Sarah A. Keller Comment

July 10, 2011

To whom it may concern:

Frankly, I am reluctant to endorse any oil exploration in the Chukchi Sea given recent events such as the Deepwater Horizon oil spill in 2010 and now the current spill from a broken pipeline into the Yellowstone River in Wyoming. Spills, blowouts and other incidents, regardless of the reasons behind them, shake the nation's confidence in oil companies and their partners as well as in regulatory agencies.

It seems more than reasonable to suggest a shift in the mindset from "it will never happen" to "it WILL happen" and to choose to be prepared. I would urge all to take up the full recommendations of the findings of the National Commission on the BP Deep Water Horizon Oil Spill and Off Shore Drilling. Regardless of the depth of the water, any oil exploration and drilling needs to follow these recommendations to safeguard the environment and establish financial responsibility.

In addition, Congress needs to fully fund the regulatory agencies involved so they can function as partners in prevention and response to any incidents. For example, there needs to be increased investment in the Coast Guard so it can receive equipment, staff and training to be ready to respond to all manner of incidents in the arctic. Coupled with this, NOAA needs support to increase its abilities and do its part for improved quality of necessary weather forecasting and real-time sea ice conditions. If the funding isn't there, then drilling should be delayed.

We need to have a transparent and traceable inclusion of science and expertise in a more effective way. I strongly support the recommendations from the 2011 excellent report by Holland-Bartels and Pierce of the USGS (An evaluation of the science needs to inform decisions on Outer Continental Shelf energy development in the Chukchi and Beaufort Seas, Alaska: U.S. Geological Survey Circular 1370, 278 p.) In that report, there is evidence of the wide gaps in our current knowledge and our understanding of the arctic ecosystems. Comprehensive research should be integrated and focused in helping us understand how the ecosystem works. Much work is needed to establish baseline data before any drilling. If the funding isn't there to support such work, then drilling should be delayed.

As Gulf Oil Commissioner and fellow Alaskan, Frances Ulmer noted in a public forum in Fairbanks, AK this past spring, the arctic doesn't just belong to the US; it belongs to a group of nations. A collaboration of arctic nations should ahead of time establish best practices methods and training appropriate to the special challenges of the arctic. Any spill will become an international incident. We as a nation need to be prepared to respond. We have seen what happens when there is ill preparedness for the inevitable. No one benefits from that. Again, a spill, blowout or similar incident WILL happen and we should do all we can to be prepared. It will cost, but it will cost much more if we do not.

Sarah A. Keller Comment

Thank you for the opportunity to comment.

Sarah W. Keller
169 Eagle Ridge Rd.
Fairbanks, AK 99712

Daniel Kelly Comment

PUBLIC SUBMISSION

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Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0103
Comment from Daniel Kelly, None

Submitter Information

Name: Daniel Kelly
Address:
898 Lincoln Street
Ketchikan, AK, 99901
Email: dan.kelly_ak@yahoo.com
Phone: (907)225-7998
Organization: None

General Comment

As an American and an energy consumer, I am writing to express support for oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to proceed with Lease Sale 193.

The Revised Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193 represents a thorough analysis of the concerns raised by those who oppose oil and gas development on Alaska's Outer Continental Shelf. Now that the Lease Sale 193 has been fully reviewed, I ask BOEMRE to move promptly to finalize this process so that Americans can realize the benefits of increased domestic production.

In addition to increasing our domestic supply of energy, development of our energy resources in Alaska's Outer Continental Shelf would have a tremendous ripple effect throughout the nation's economy - creating tens of thousands of jobs nationwide. At a time when Americans are struggling to find work and unemployment remains high in many states, the jobs and economic growth associated with Alaska's OCS are significant. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs

Daniel Kelly Comment

nationwide with a cumulative payroll of \$154 billion over the next 50 years. Outside Alaska, development of the Chukchi Sea would generate approximately 15,200 U.S. jobs annually during the production phase and an average of 12,100 jobs annually through 2050.

Offshore oil and gas development in the Chukchi Sea, as well as the Beaufort Sea, has the potential to help the United States meet its energy demand, create jobs, and grow the economy. Proceeding with Lease Sale 193 is in the best interest of all Americans. There has been ample opportunity for environmental review and public input on Lease Sale 193. Therefore, upon conclusion of this public comment period, I urge BOEMRE to move forward so that Americans can reap the economic and energy security benefits of Ala

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PUBLIC SUBMISSION

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0119

Comment from Beth Klein, Resource Development Council

Submitter Information

Name: Beth Klein

Address:

5706 Denali St
 Anchorage, AK, 99518

Email: bethk98@yahoo.com

Organization: Resource Development Council

General Comment

Industry got this state going and has sustained it through the years. Sale 193 is important in ensuring a future for our state, our children and our businesses. The cost of energy is rising and we have a solution in our midst- it's time to take action and get a move on the OCS.

Without opposition we can become complacent... We, as Alaskans, have never been complacent in keeping our land/sea safe and will continue to make every effort to do just that.

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PUBLIC SUBMISSION

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Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0011

Comment from Sarah Lawer, N/A

Submitter Information

Name: Sarah Lawer

Address:

1607 11th Avenue W
 Seattle, WA, 98119

Email: sarahlawer@hotmail.com

Organization: N/A

General Comment

Due to declining rates of oil production in the onshore North Slope region, offshore resources are desperately needed to offset these production losses, fill the pipeline and keep the Trans-Alaska Pipeline flowing for generations to come. The economic activity from the development of the Chukchi and Beaufort Seas would also create an annual average of 54,700 jobs nationwide with a cumulative payroll of \$154 billion over the next 50 years.

The time is now to help the U.S. meet its energy demand and grow the economy by developing the resources in Alaska's Outer Continental Shelf. From hauling produce across the nation to flying people home, it is important to acknowledge how much energy we consume and realize how the Trans-Alaska Pipeline impacts our nation's energy security infrastructure.

To grow our economy, within Alaska and throughout the nation, I urge BOEMRE to move forward and proceed with Lease Sale 193. Thank you.

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June 30 2011

James Kendall, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I'm writing to represent my family of four, and express concern over oil and gas development in the Chukchi Sea and to urge the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) to reconsider Lease Sale 193.

Though we all need to think seriously about energy and sustainability, this needs to encompass all areas life, including that of our children, and other species, on which we mutually inter-depend.

Pro-development supporters have deep pockets to influence decision-making, so it is even more important to also listen to little people without loud voices. While the deep pockets say they seek development to save costs, I suspect the first one they benefit its themselves.

I believe there are less harmful ways to accomplish these goals without the damage these actions may cause. I agree with the MIT professor's quote that an oil spill in the Chukchi Sea is a "low frequency, high impact" event, much as the others have been (Exxon Valdez, BP Horizon, etc.) Is this the price we want to pay for our stubbornness and refusal to inconvenience ourselves enough to find clean energy and altar our lifestyles a bit? It's like irresponsibly driving down a crowded freeway, causing a lot of collateral damage to innocent people. While that would never be tolerated, removing the damage to our oceans, and causing harm on such a large scale boggles the mind to the point of immobilization and denial.

God gave us natural resources to figure out what to do with them. He also gave us intelligence and creativity. It's time to explore alternatives God has also given us, which do not negatively impact so many of his other creations.

I hope you consider this point of view when you conduct the environmental review and public input on Lease Sale 193. There are other ways Americans can reap economic and energy security benefits without damaging the Outer Continental Shelf and risking so much harm. Thank you.

Sincerely,

Colleen Leibert

3116 Antioch Circle

Anchorage, AK 99508



Christopher Lish Comment

Sunday, July 10, 2011

Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Subject: Protect Wildlife in America's Arctic from Drilling -- Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale (Document ID BOEM-2011-0044-0001)

Dear Secretary Salazar and BOERME Alaska OCS Regional Director,

The Bureau of Ocean Energy Management, Regulation, and Enforcement (BOERME) and the Department of the Interior (DOI) are currently making important decisions about the Arctic Ocean that threaten long-term consequences for the region. The BOERME is currently in the process of reconsidering the Bush-era Chukchi Sea Lease Sale 193 that was sent back to the agency by an Alaska Federal court last summer. It is also considering plans by Shell Oil Co. to drill for oil in the Chukchi and Beaufort seas starting in 2012 and revisions to the accompanying oil spill response plans.

"It is horrifying that we have to fight our own government to save the environment."
-- Ansel Adams

Disappointingly (but not surprisingly), the revised draft supplemental EIS does not sufficiently account for missing information and, as a result, the BOEMRE should not move forward with Lease Sale 193. The BOEMRE and the DOI should not reaffirm the Chukchi Sea leases and should not approve Shell's plans to drill until fundamental questions about the Arctic Ocean have been answered through more scientific study and synthesis (such as research on the effects of oil and gas activities on fish, birds, and marine mammals) and not before realistic and effective plans to respond to a large oil spill are put in place. I urge you not to move forward with risky, aggressive leasing and drilling plans in America's Arctic Ocean. At a minimum, the BOEMRE should suspend the leases sold until the necessary baseline information is available to determine whether drilling activities should occur and, if so, under what conditions. The decisions you make as part of this process will provide important direction for our ocean resources, in particular for Alaska's Chukchi Sea.

"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish—indeed, all the living creatures of prairie and woodland and seashore—from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."

Christopher Lish Comment

-- Theodore Roosevelt

There is far too much at risk. The Arctic is one of the most beautiful and forbidding places on Earth, where temperatures regularly plunge well below zero and the time between sunset and sunrise is sometimes measured in months rather than hours. Despite these difficult conditions, a variety of people and animals have adapted to thrive at the top of the world. The Arctic Ocean is a pristine, remote region, home to many threatened and endangered species, including many of our nation's most iconic wildlife species: polar bears, walrus, ice seals, bowhead whales, beluga whales and more. This region is also of great significance to Alaska Native communities which rely on the Arctic Ocean to sustain their way of life. As a people who have lived off the bounty of the Arctic Ocean for thousands of years, the Inupiat traditionally spend weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their garden and we must protect it for future generations. Unfortunately, facing pressures of climate change and industrialization, a bottleneck for survival has been created in the Arctic Ocean, ultimately threatening wildlife and putting Arctic community's subsistence way of life at risk.

"As we peer into society's future, we—you and I, and our government—must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow."
-- Dwight D. Eisenhower

It is also beyond dispute that many basic questions about the Arctic Ocean ecosystem remain unanswered. The Arctic's unique marine environment is one of the least understood areas in the world, so a base-line scientific understanding of the area is also critical for future development. There is a lack of basic science—from simple species counts of marine mammals, such as the threatened polar bear and the endangered bowhead whale, to information about currents and tidal systems. There is much more that must be understood in this remote area—through a comprehensive research and synthesis plan—before leasing and drilling can be allowed to proceed. Without this basic information, we cannot know the potential consequences of oil development there and we cannot manage those activities in a way that protects the people and resources of the region, particularly in the face of ever growing climate change threats. Even the National Marine Fisheries Service has told the BOEMRE that it should obtain more information about the effects of oil and gas activities—especially seismic testing—on fish before proceeding with decisions about drilling. Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding.

Christopher Lish Comment

"Our government is like a rich and foolish spendthrift who has inherited a magnificent estate in perfect order, and then has left his fields and meadows, forests and parks to be sold and plundered and wasted."
-- John Muir

It is too soon to permit oil and gas activities in the Arctic Ocean. Oil drilling companies must have basic, essential information and technologies to clean up an oil spill in Arctic conditions beyond today's inadequate means. The Presidential commission on the BP-Deepwater Horizon disaster identified there are "serious concerns" and "special considerations" regarding Arctic drilling. The BOEMRE's own analysis shows that very large oil spills similar in size to that of the BP-Deepwater Horizon disaster could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's communities and species, such as the threatened polar bear as well as endangered birds and whales. As if this were not serious enough, BOEMRE's predecessor agency, the Minerals Management Service previously stated that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. There are no trained personnel or equipment in the region capable of carrying out an effective response plan and there is a clear lack of basic scientific information about the ocean ecosystem. The vibrancy and biodiversity of the Arctic ecosystem depends on how we manage future development.

"Then I say the Earth belongs to each generation during its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence."
-- Thomas Jefferson

Last year's disaster in the Gulf of Mexico taught us that preparation is key. However, Shell Oil Company's oil spill prevention plan for the Chukchi Sea is wholly inadequate. It is based on flawed and unrealistic assumptions. The Coast Guard and other agencies agree—we are woefully unprepared to respond to a large oil spill in the Arctic Ocean were one to occur. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The threat of oil spills and the inability to clean them up are reason enough to cancel any plans for proposed drilling.

"It is our task in our time and in our generation, to hand down undiminished to those who come after us, as was handed down to us by those who went before, the natural wealth and beauty which is ours."
-- John F. Kennedy

With all of this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean. The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks

Christopher Lish Comment

are minimized. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

"I think America will have come to maturity when it will be possible to erect somewhere in the United States a great bronze marker which will read: "Beneath these lands which surround you there lies enormous mineral wealth. However, it is the judgment of the American people, who looked up this area, that these lands shall not be disturbed, because we wish posterity to know that somewhere in our country, in gratitude to nature, there was at least one material resource that we could let alone."
-- Freeman Tilden

Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot possibly make informed decisions about whether oil and gas activities should occur in Arctic waters, particularly against the backdrop of sea ice loss and ocean acidification, two existential threats caused by fossil fuel burning that could rip out the very foundation of the Arctic Ocean ecosystem.. BOEMRE must ensure that Shell Oil's plans to drill in the Chukchi Sea for 2012 and 2013 address these issues, including the impacts from a potential blowout during drilling.

"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."
-- Theodore Roosevelt

America's Arctic Ocean is in your hands. We need to ensure that any offshore development puts our coastal communities, wildlife, and waters first. Please do not allow Shell Oil's risky and aggressive offshore drilling plan to occur in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. There is too much at stake.

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."
-- Aldo Leopold

Thank you for the opportunity to comment on the Revised Draft Supplemental Environmental Impact Statement (EIS) and Lease Sale 193 in the Chukchi Sea. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,
Christopher Lish
Olema, CA

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
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 Tracking No. 80ebfb7
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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0109
 Comment from Natalie Lowman, ConocoPhillips Alaska

Submitter Information

Name: Natalie Lowman
Address:
 1310 P Street
 Anchorage, AK, 99501
Email: kittyjean@gmail.com
Phone: 907-258-8706
Organization: ConocoPhillips Alaska

General Comment

I urge you to affirm Lease Sale 193, and allow exploration to move forward in the Chukchi Sea. This could be an important source of domestic energy for the U.S., and could help keep the trans-Alaska pipeline operating well into the future. New jobs would be created and revenues from the OCS could help offset the federal deficit. Industry is committed to exploring in a way that respects the environment and the lifestyle of local residents. More studies are in progress to better understand the science of the Arctic, but even now, the Chukchi Sea is one of the most studied basins in the world. I support the SEIS and believe it provides sufficient information and analysis to move forward with Lease Sale 193. Thank you,
 Natalie Lowman
 A lifelong resident of Alaska

Regional Director, Bureau of Ocean Energy Management,
 Regulation and Enforcement, Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

July 8, 2011

Dear Director:

I would like to respectfully request that no decisions regarding drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Additionally, any decisions that would recommend drilling should be put on hold until proven, accessible technology exists to clean up a spill in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Consider that the Arctic's diverse marine environment is one of the least understood in the world. There is a lack of basic science—from simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) should not move ahead with decisions about drilling before it has collected crucial information which is lacking -- including the potential impact of an oil spill in the Arctic Ocean ecosystem and how it would adversely affect life in this fragile area.

The National Marine Fisheries Service has informed the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish should be an indicator that additional work needs completed prior to any decision being made regarding the Arctic. The DOI should fill such data gaps before making any leasing decisions.

The Inupiat people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their chief food source, and we have an obligation to protect it for future generations.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis which shows that such a spill could have catastrophic effects on the region's wildlife, such as the polar bear, numerous bird species, and a large number of whale species.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell's plans in the Chukchi for 2012 and 2013, more environmental analysis really need to be completed. This missing information is an essential component of a much-needed plan to conserve and manage America's Arctic Ocean. And I strongly urge you to ensure that the oil industry's response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these truly unique areas until the necessary information is collected and reasonable spill cleanup plans are incorporated and are ready to go. Anything less would be a serious tragedy and is totally unacceptable.

Thank for this opportunity to express my thoughts and concerns about this highly volatile, dynamic, and emotional topic.

Best Regards,

David Lee Marshall
 David Lee Marshall
 343 Faculty Road
 Duncannon, PA 17020

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 JUL 13 2011

REGIONAL DIRECTOR, ALASKA OCS
 MINERAL MANAGEMENT SERVICE
 ANCHORAGE, AK

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PUBLIC SUBMISSION

As of: July 25, 2011
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 Comments Due: July 11, 2011
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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0023
 Comment from Kevin McDaid, None

Submitter Information

Name: Kevin McDaid
Address:
 6901 Fountain Dr
 Anchorage, AK, 99502
Email: mcdaid@gci.net
Phone: 907-243-0808
Organization: None

General Comment

With high energy prices in the United States and the impact on our economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore. We need to stop these delays by the EPA and BOEM in the Chukchi Sea now!

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0054
 Comment from Robyn McGhee, Private

Submitter Information

Name: Robyn McGhee
Address:
 12921 Foster Road
 Anchorage, AK, 99516
Email: mcghee@acsalaska.net
Organization: Private

General Comment

The revised SEIS should contribute to Lease Sale 193 being affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and most certainly discourage future industry investment without a corresponding benefit to the environment. Several large oil and gas firms have already spent billions of dollars preparing to responsibly explore and produce oil from this area and to rescind the leases at this point would be tragic. The Chukchi OCS is an important future source of US energy supply and now more than ever, the US needs domestic sources of energy. Plus, this production can help offset the declining flow through the Trans-Alaska pipeline at a time when it will be very critical to do so.

I firmly believe the oil and gas industry can produce oil in a safe and environmentally responsible manner. My family's future and my children's future, along with my State's future, depend upon continued oil and gas exploration and production.

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Pamela A. Miller Comment

Pamela A. Miller
P.O. Box 82803
Fairbanks, AK 99708
pammiller@alaska.com

July 11, 2011

Dr. James Kendall
Regional Director
BOEMRE Alaska OCS Region
3801 Centerpoint Dr.
Anchorage AK 99503-5820
VIA www.regulations.gov

Re: Chukchi Sea Lease Sale 193 Revised Draft Supplemental Environmental Impact Statement, OCS EIS/EA BOEMRE 2010-034 (May 2011)

Dear Regional Director Kendall:

I wish to provide a few additional individual comments based on my long history in reviewing Beaufort Sea and Chukchi Sea lease sale documents, as well as exploration and development plans. I also served as a peer reviewer to the National Research Council's 2003 study, Cumulative environmental effects of oil and gas activities on Alaska's North Slope and served on the Alaska OCS advisory committee during the 1990's.

ACMP... Gone. A significant new piece of information that must be considered in this SEIS is that the state of Alaska has abolished its Alaska Coastal Management Program (ACMP) as of July 1, 2011. The lack of the ACMP to meet the nation's goals for protecting vital coastal estuaries and sensitive shorelines so important to fish, wildlife, and people that had been achieved through this opt-in mechanism for implementing the Coastal Zone Management Act is a huge change that constitutes significant new information.

This is highly relevant to evaluating data gaps and the necessity for the federal government to obtain the relevant information so that it can assess impacts, consider a full range of lease sale alternatives, and also to design and require adequate mitigative measures for the lease sale and subsequent exploration and production activities. It is also relevant to the consideration of the Very Large Oil Spill analysis due to the grave impacts that blowout spills could pose including to the coastal zone. This change is also significant for your evaluation of impacts from natural gas development (especially in the nearshore waters, shoreline landfall and transition zone, and where it traverses onshore tundra wetlands), as the coastal standards that used to be in place through the ACMP no longer exist.

Pamela A. Miller Comment

section from P.A. Miller, et al, 1993, Oil in Arctic Waters, Chapter 8, p.74⁴ (see Attachment). At all three Chukchi Sea wells for which records could be obtained, there were critical curtailments of operations. The movement of wells off the drill location and suspension of operations adds considerable risks to the drilling operation.

There have been many gas blowouts in Alaska, including in Cook Inlet (see P.A. Miller, 1993, p. 78) and along the coasts of the Beaufort Sea. In June 1989, the Kulluk drillship which is now proposed for use in Shell's Beaufort Sea drilling program had a natural gas blowout in the Canadian Arctic. This was also the same rig used for the earlier Kuvlum well in the U.S. Beaufort Sea.⁵ A more thorough assessment of natural gas blowouts should be done, especially in light of the assumption that natural gas drilling will be done on the same exploratory rigs and production platforms as oil exploration and development.

The revised draft SEIS fails to address the risks from critical curtailment operations, and their expected frequency, and this additional risk from natural gas drilling (as well as combined with risks from oil well drilling) needs to be considered along with more specific information regarding movements of sea ice during the year. This could affect not only mitigation measures regarding timing of exploratory and production drilling but also geographic scope of lease sale areas and where particular activities and operations are prohibited due to the nature of the conditions.

I have been told by an environmental scientist from BOEMRE that if there is an oil spill in the Chukchi Sea it will go "all over the place." This is not the impression that the convoluted presentation of the trajectory analysis in the OSRA presents.

I strongly urge the agency to go back to the drawing board, get the proper oceanographic, sea ice, and biological information (including critical migration, staging, nesting, feeding areas and conservation system units including Alaska Maritime and other national wildlife refuges, national parks and preserves, wilderness areas, marine protected areas, state critical habitat areas) that is needed. Then use modern GIS overlay analyses along with a graphic designer to show meaningful animations where the oil spill would spread from various drilling, pipeline, tanker (including those used for well testing, fuel hauling and oil spill cleanup tankers). The New York Times did a great job of presenting this information in a way that was understandable and presented the relevant layers of information, including the dozens of impacted national wildlife refuges, during the crisis period of the Deepwater Horizon Gulf of Mexico disaster.

⁴ P.A. Miller et al. 1993. Data Source: MMS, 9 April 1991. Letter for response to Greenpeace USA FOIA request dated 2 October 1990. Summary of Critical Operations and Curtailment Plans: Implementation Resulting in Suspension of Operations.

⁵ Letter from George N. Ahmaogak, Sr., North Slope Borough Mayor, 11 October 1989, to John A. Krause, Undersecretary for Oceans and Atmosphere, about State of Alaska objection to consistency certification for Amoco Galahad Prospect.

Pamela A. Miller Comment

While the ACMP had already been weakened by Gov. Frank Murkowski to eliminate local district enforceable standards, now this important program with its statewide standards and role for addressing Alaskan public concerns is completely gone. This program not only contained important standards for protecting the human and natural environment onshore and in the state's 3-mile zone it also applied to the impacts from offshore activities and infrastructure that had impacts to the coastal zone including to subsistence, recreation, and ecological integrity.

Since it just expired this month¹ due to failure of the Alaska state House to pass an extension to the ACMP in the face of lack of support from Governor Parnell,² it is too soon to provide a thorough analysis of all of the coastal measures that are no longer in place. The simple truth is that as an Alaskan resident, I can no longer look to the state of Alaska to provide any meaningful avenues for addressing the impacts of offshore development.

The State of Alaska can no longer claim that it has high environmental standards for coastal or offshore development now that the ACMP is dead. The ACMP had enforceable standards, in addition to a streamlined way to provide public comment. Alaska's track record of environmental impact review and regulation has hit rock bottom.³

Sea Ice... Going... (in summer) but More Dynamic. The recent USGS study noted that the complexity and predictability of Arctic Ocean sea ice has changed dramatically. It said, "although portions of the Chukchi and Beaufort Seas are expected to be ice-free for a greater period of time each year, the pack ice is predicted to be more dynamic at certain times, increasing the risk of accidents and making oil-spill response more difficult during these times." (p. 217-218).

The revised draft SEIS fails to address how this may affect pileups, pressure ridging, ice movements, ice gouging, streudal scouring, and the force of ice that can affect the integrity of offshore exploratory and production platforms, including for natural gas development, subsea buried pipelines especially in the transition zone at landfall, and coastal erosion which could affect the integrity of offshore pipelines. If the (oil and) natural gas pipeline landfall is near Wainwright, how might gas pipeline breaks, leaks, and explosions affect local residents?

During prior exploratory well drilling, sea ice and major weather factors such as wind and waves caused drilling operations to need to be shut down and the rigs moved offsite. This operation is called critical curtailment. The attachment provides information obtained from MMS about the Chukchi Sea and Beaufort Sea drilling critical curtailments as of 1993 when the analysis was done, as is described in the following

¹ The program ended July 1, 2011 per AS 44.66.030. <http://www.alaskacoast.state.ak.us/> (accessed July 11, 2011)
² http://articles.ktuu.com/2011-06-28/extension-bill_29715215; http://www.alaska-native-news.com/article/State_News/State_News/Coastal_Zone_Management_is_History/22929
³ Bob Shavelson, July 6, 2011, Homer News, "Alaskans lose rights without coastal management program," http://homerenews.com/stories/070611/oped_alrwcsm.shtml

Pamela A. Miller Comment

Please do not wait until the first disaster in the sensitive Arctic Ocean and surrounding coasts to provide relevant and meaningful information upon which to consider the long-term risks and environmental impacts that Chukchi Sea Lease Sale 193 sets in motion.

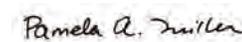
I also urge you to consider to provide the full public comment letters, with the annotations by BOEMRE indicated right on them for the response to comments. Much of the significance and context of comments results from the whole body of thought and knowledge that is provided in a letter and particularly during the public hearings (the entire hearing transcript also should be provided, intact).

I urge the Interior Department to go back to the drawing board with a new review once the scientific data gaps are addressed and a comprehensive scientific baseline program has undertaken adequate studies. As the Arctic Ocean faces potentially a huge transformation from a wild, remote ocean to an industrialized zone into the indeterminate but very long-term future, it is wise to proceed with ample caution. No new drilling should take place in the Arctic Ocean in light of the huge data gaps and the woeful inability to respond to – much less clean up – oil spills in icy seas.

I have looked out at the Chukchi Sea with a subsistence fisherman and hunter in Point Hope who pointed out four different currents moving before us. He watched subtle changes in the surface of the water to see the fish coming then set his net. He followed the low flight of eiders winging the shore, showed me a whale spout, shared great respect for the ocean and its life. A seal looked at us for a long time. My friend sat so still for many long hours gazing at the ever changing ocean that provides for him and his family and has forever.

Why would we risk all this?

Sincerely,



Pamela A. Miller
Wildlife Biologist

Attachment follows

Pamela A. Miller Comment

Common Occurrences

Critical Curtailment of Drilships in Arctic Waters

These incidents involved drilships operating in the Arctic which were required to suspend operations, secure the well and wait for hazardous ice floes or weather to pass. All Chukchi wells drilled to date, and 60 percent of wells drilled in the Beaufort Sea Lease Sale 57 area had operations curtailed. The incidents below represent a total of over 2,000 hours, or 84 days, in which natural conditions exceeded operating limitations of the drilling technology from 1985-1990. The bowhead whale migration was underway during these hazardous suspensions of drilling. The Hammerhead, Corona, and Belcher wells are all offshore of the Arctic National Wildlife Refuge.¹⁶

Beaufort Sea "Hammerhead" Well (UNOCAL) 1985
August 17 - 23 90 percent ice cover, thick multi-year ice with ridges; disconnect and move off location.
Aug. 23, Aug. 29 Hazardous ice in vicinity.
Sep. 16-22 Thick ice encroaching; 44 knot winds; disconnect and move off location.

Beaufort Sea "Hammerhead" Well (UNOCAL) 1986
Sep. 21-22 45 knot winds; 15 foot seas; excessive vessel motion.

Beaufort Sea "Corona" Well (Shell Western E&P Inc.) 1985
Sep. 26-27 Move off location; ice floe 3 miles long by 3/4 mile wide; whales migrating.
Sep. 28-Oct. 30 Disconnect and move off location for 754 hours; 70 percent ice cover moving at .5 knots; whales migrating.

Beaufort Sea "Corona" Well (Shell Western E&P Inc.) 1986
July 31-Aug. 1 Disconnect and move off location; 75 percent ice cover moving .3 knots.
Aug. 10-11 Disconnect and move off location; 5 large floes with rubble ice, 22 miles long by 5 miles wide; 14 knot wind.
Aug. 21-30 Disconnect and move off location; large unmanageable floes near drill site, moving .9 knots, 50 knot winds.
Aug. 31- Sep. 2 Disconnect and move off location; ice floe mile wide, 19 knot winds; heavy ice concentrations moving over site at 1.8 knots.

Beaufort Sea "Belcher" Well (Amoco) 1988-89
Sep. 13, 1988 Hazardous ice near location.
Sep. 19 80 percent ice cover, moving 1 knot; 40 knot winds.
Sep. 20-26 Disconnect and move off location; movement of several large multi-year ice floes into area in excess of 1 knot; 33-45 knot winds.
Sep. 30 Monitor ice movements; gale force winds and heavy ice cover in vicinity.
Oct. 4 Disconnect; 90 percent ice cover with 0.4 knot drift.
Oct. 8 Wait on weather; giant floe 20 miles south of location.
Oct. 16-26 Disconnect and move off location for 216 hours; ice 8 feet thick, 100 percent cover; 21 knot winds.
Aug. 6-11, 1989 Disconnect and move off location; ice 8 feet thick, 90 percent cover; drift with ice.

Chukchi Sea "Popcorn" Well (Shell Western E&P Inc.) 1989-90
Oct. 16, 1989 Wait for weather; 35 knot winds, 10 foot seas; excessive vessel motion.
Aug. 26, 1990 Wait for weather; 50 knot winds, 20 foot seas; excessive vessel motion.
Aug. 31 Wait for weather; 10 knot winds, 8 foot seas; excessive vessel motion.
Sep. 11-15 Wait for weather; 50 knot winds, 20 foot seas; excessive vessel motion.
Sep. 17 Wait for weather; 50 knot winds, 20 foot seas; excessive vessel motion.

Chukchi Sea "Crackjack" Well (Shell Western E&P Inc.) 1990
Sep. 24 Wait for weather; 45 knot winds, 20 foot seas; excessive vessel motion.

Chukchi Sea "Klondike" Well (Shell Western E&P Inc.) 1989
Sep. 9 Wait for weather; 16 knot winds, 18 foot seas; excessive vessel motion.

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The Industrialized Arctic

Karl Monetti Comment

PUBLIC SUBMISSION

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Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0004

Comment from karl monetti, private individual

Submitter Information

Name: karl monetti

Address:

box 56302

north pole, AK, 99705

Email: karlmonetti@gmail.com

Organization: private individual

General Comment

I attended a hearing this evening in Fairbanks, Ak. regarding the DSEIS for 193. I am not against oil exploration and/or development, but wish only to see that it is done in the most environmentally save manner. My concerns are as follows;

- 1; weather, extreme cold, high winds, making any clean-up efforts more difficult.
- 2; shifting ice; very powerful, unstoppable forces that could damage or destroy drill rigs/platforms
- 3; fragile ecosystem, very sensitive to contamination by petroleum products
- 4; lack of any experience any where in the world with oil recovery from spills in extreme cold regions, in broken ice, or even under-ice spills, which could go undetected
- 5; a fragile, local food chain for the Inuit who have lived along this cost for thousands of years and whose livelihood and culture depend on maintaining a healthy ocean environment
- 6; regarding the DSEIS itself, I see mention of cleanup, response, etc., but no mention of PREVENTION. If industry can develop foolproof methodology, perhaps spill response would be a moot point; we did, after all, land men on the moon!
- 7; the DSEIS actually seems to admit a 27-54% possibility for a large oil spill from drilling activities in this area; is that really a risk we should be taking for our ocean?
- 8; with the lax permitting for, lack of strict governmental agency scrutiny of, and in some cases actual covering up of abuses, oversights, and mistakes by the oil companies by agencies charged

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Karl Monetti Comment

with protecting the environment, I find it hard to look at the process under discussion with a level eye. The district court has asked for clarification of many point that had been left out of the original EIS, and I still do not see them addressed in the current draft. Issues concerning baseline environmental information, wildlife populations, etc., needs to be fully studied, reported and addressed.

I feel some of these concerns can be addressed adequately, but, if not, then the leases should not go ahead in area 193.

Thanks

Representative Form Comment and List Provided by National Wildlife Federation

RECEIVED
JUL 11 2011

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

July 7, 2011

Bureau of Ocean Energy Management, Regulation and Enforcement,
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Subject: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Regional Director:

Enclosed is the list of National Wildlife Federation members and supporters who submitted comments on the Revised Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Gas Lease Sale 193 (Document ID BOEM-2011-0044-0001).

Thank you.

Sincerely,

Robyn

Robyn Carmichael, Online Outreach Coordinator
National Wildlife Federation, Pacific Regional Center
6 Nickerson Street, Suite 200, Seattle, WA 98109
Phone: 206-577-7826
Email: CarmichaelR@nwf.org

Dear Bureau of Ocean Energy Management, Regulation and Enforcement,

Mr. Bob & Tallie M. Moore-Bush
 507 County Road 32050
 Brookston, TX 75421-2513

The future of America's Arctic Ocean may be decided this summer. I'm writing to ask that no decisions about drilling in Arctic waters are made before there is demonstrated, proven technology to clean up a spill in the Arctic's unique and extreme conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Jun 30, 2011

The revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193 shows that very large oil spills could occur from drilling in the Chukchi Sea and could have catastrophic effects on the region's species, such as endangered bowhead whales as well as polar bears, birds and other Arctic wildlife.

James Kendall
 3801Centerpoint Drive, Suite 500
 Anchorage, AK 99503

Please do not allow the oil industry to move forward with risky plans to drill in these one-of-a-kind waters, with so much at risk should a large spill occur.

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Sincerely,

DON'T LET THEM NEAR THE ARCTIC: AFTER THE BP SPELL IN THE GULF WE HAVE PROOF THAT OIL COMPANIES ARE DIRTY AND HAVE LOTS OF HELP HIDING FROM THEIR MESSES!!

First Name	Last Name	Street Address	City	State	Zip
Mary Anne	Vestal	2645 N. Douglas Avenue	Arlington Heights	IL	60004-2586
Bill	Nichols	3326 San Jose St	Clearwater	FL	33759-3623
Gloria	Antaramian	49 Carrough Rd	Upper Saddle River,	NJ	07458-1854
Janis	Wilson	3401 Anderson Rd Unit 42	Antioch	TN	37013-6005
Paula	Bargiel	706 Western	Park Ridge	IL	60068-2552
Nancy	Herr	2019 NE 179th St., #W103	Ridgefield	WA	98642-8605
Wayne & Meg	Voigtschild	1550 American Blvd E	Bloomington	MN	55425-1139
Kelly	Wynn	2358 Soft Wind Ct.	Reston	VA	20191-4421
Permy	Moser	102 Hunter Dr	Martin	TN	38237-2305
Marie Ann	Thaler Shenk	839 Sussex Circle	Thousand Oaks	CA	91360-5245
Jennifer	Bell	198 Boulevard	Hasbrouck Heights	NJ	07604-1827
Marion	Thorne	51 W Saucun St	Hellertown	PA	18055-1746
Casey	Eganey	217 D Street	Eureka	CA	95501-0435
Daryl W.	Rice	887 Deep Run Road	Perkasie	PA	18944-4240
Eric	Swenson	716 NW 11th Ave	Gainesville	FL	32601-4151
Maria	Barina	19 Pittsfield Rd	Howell	NJ	07731-2311
Salme	Arrnjo	2 Allegro St	Blue Diamond	NV	89004
Jeff	Valentine	901 Peachtree Forest Ter	Norcross	GA	30092-4578
Jenny	Bodwell	1520 Liberty Ave.	Terre Haute	IN	47807-2205
Tom	Jackson	1124 s King st	denver	CO	80219-3923
Martin	Falk	728 Stephens Dr.	Eugene	OR	97404-3281
Jennifer	Willis	P.O.Box 201	Summerland	CA	93067-0201
Mary	Pettengill	402 Ascot Lane	Bucksburg	VA	24060-4035
Renee	Greenwood	345 Prospect Ave. Apt. 7H	Hackensack	NJ	07601-7752
Alicia	Koberstein	38 Avignon	Newport Coast	CA	92657-1008
kathleen	laws	809 ne 41 ave	portland	OR	97232-2617
S.S.	Shaw	3945 Pleasant Run Rd. #201	Irving	TX	75038-1800
V R	Sansone, MD	456 Robles Way	Vallejo	CA	94591-8037
John	Horkulic	106 WOODLAND PARK	WINTERSVILLE	OH	43953-3856

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

Representative Form Letters from NRDC submittal of 51,975

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Sincerely,
 Mr. Bob & Tallie M. Moore-Bush

Representative Form Letters from NRDC submittal of 51,975

Mr. Max Macauley
 1025 Valencia Dr SE
 Albuquerque, NM 87108-4773

Jun 30, 2011

James Kendall
 3801Centerpoint Drive, Suite 500
 Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

*** I am a 74-yr old veteran, citizen activist and concerned citizen--especially about leaving behind me a living, healthy planet where present and future generations of children can do their part to protect and preserve in good condition the natural world we all live in! Please do YOUR part to help provide a viable future for all living creatures and the environment!--Max Macauley ***

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

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As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Representative Form Letters from NRDC submittal of 51,975

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Sincerely,
Mr. Max Macauley

Representative Form Letters from NRDC submittal of 51,975

Mr. Jeff Baker
242 Melody Ln
Watsonville, CA 95076-1217

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Stop drilling in the arctic ocean please!

Sincerely,
Mr. Jeff Baker

Representative Form Letters from NRDC submittal of 51,975

Mr. Jim Cokas
3438 Irvine Ave
Newport Beach, CA 92660-3114

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I don't need to tell you that BOEMRE conducted an analysis showing that very large oil spills could occur from drilling in the Chukchi Sea. And that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales.

I don't need to tell you that the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's sea ice environment. But here I am doing it anyway. Why? Because some things matter should (and do!) matter more than the rush for yet more profits by an industry that does not possess the necessary knowledge or skill to prevent or control a spill or blowout in this volatile and irreplaceable environment

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Sincerely,
Mr. Jim Cokas

Representative Form Letters from NRDC submittal of 51,975

Ms. Virginia Hanson
71 Wendt Way
Kalispell, MT 59901-6911

Jun 30, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Sincerely,
Ms. Virginia Hanson

Representative Form Letters from NRDC submittal of 51,975

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

My feelings are less measured than those of NRDC. I say, after Deepwater Horizon and Fukushima: no new underwater drilling, no new nukes. We've had our chance at being responsible enough to handle this stuff, now it's time to admit that the planet is already awash in wind, sunlight, and other renewables, which together should become 99% of our sources of energy ASAP.

Best,
Thomas Marshalek

Sincerely,
Mr. Thomas Marshalek

Representative Form Letters from NRDC submittal of 51,975

Ms. Debra Neel
623 Monte Vista Dr
Dallas, TX 75223-1241

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. As you know, there is too much at stake.

Thank you for consideration.

Sincerely,
Ms. Debra Neel

Representative Form Letters from NRDC submittal of 51,975

Mr. Steve Rollner
Foothill Avenue
Sierra Madre, CA 91024

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Stop this insanity of allowing big oil to destroy our environment! We are demanding this from YOU.

You MUST rely on science, not greed, to be true guardians of this nation's resources. We are really tired of government that can easily be bought!!!

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to

Representative Form Letters from NRDC submittal of 51,975

ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Sincerely,
Mr. Steve Rollner

Representative Form Letters from NRDC submittal of 51,975

Mrs. Robin Swennes
6 Chapman Ln
Kennebunk, ME 04043-6289

Jun 30, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

This organization wants me to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. I want to go one step further and say that there should be NO DRILLING in the Arctic, period.

Everyday I get requests from organizations trying to protect this planet, asking me to TAKE ACTION. I'm happy to do it, but I am dismayed and disgusted that I or they even have to ask. What part about polluting this planet we all have to live on do you not understand? The concept is pretty simple. If we keep polluting this planet, it will become inhabitable. We've been given a perfect environment that we mess up constantly w/oil drilling, toxic emissions, and various other atrocities. Didn't we learn the lesson w/the Gulf oil spill?

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters. There is too much at stake.

Sincerely,
Mrs. Robin Swennes

Representative Form Letters from NRDC submittal of 51,975

Ms. Christine Carmines
412 Texas St
San Francisco, CA 94107-2933

Jul 1, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

Sir: Please read my concluding comments.

I'm writing to ask that you make no decisions about drilling in the Arctic Ocean until a plan is in place to gather basic scientific information about the region and there is proven technology to clean up a spill in the Arctic's unique conditions. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

The Arctic's rich marine environment is the least understood area in the world. There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so.

Representative Form Letters from NRDC submittal of 51,975

I urge you not to allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake.

Please, please listen to me sir. This has to be the tenth letter I've sent pleading for those who make a difference to realize the tremendous biological significance of the polar bear's plight. As they go, so will we. Please stop this profits at any and all costs mentality before it is too late for all of us. Thank you so much; I am also a biologist, not just a passionate member of the public.

Sincerely,
Ms. Christine Carmines

Representative Form Letters from NRDC submittal of 51,975

Ms. Kay Woods
10118 W Desert Rock Dr
Sun City, AZ 85351-1273

Jul 7, 2011

James Kendall
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Subject: Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear James Kendall,

The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. With the on-going impact that the most recent oil spills continue to have on our eco-system, I'm writing to ask that you make no decisions about drilling in the Arctic Ocean. We must first execute a plan to gather basic scientific information about the region and also have a proven technology to clean up a spill in the Arctic where unique conditions abound.

The Arctic's rich marine environment is the least understood area in the world and if we make a mistake now, there are no "do overs". There is a lack of basic science from simple species counts of marine mammals to information about currents and tidal systems. The Department of Interior (DOI) must fill missing data gaps before moving forward with any, preferably short term, leasing decisions. The National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, before proceeding with decisions about drilling. This information is an essential part of creating a plan to manage America's Arctic Ocean. We must also protect the Arctic Ocean for the Inupiat, who have lived off the bounty of its waters for thousands of years, and for future generations who will continue to do so. There should be concern for the lack of adequate maintenance and replacement of parts of the existing Alaska pipeline and the prevention of oil spills for drilling sites that already exist.

As part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis that shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, including polar bears, birds and whales. Before BOEMRE considers any drilling in the Arctic Ocean, such as Shell Oil's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed, including the impacts from a potential blowout oil spill during the proposed drilling.

Furthermore, BOEMRE's predecessor agency, the Minerals Management Service, previously confirmed that no technology exists to clean up a

Representative Form Letters from NRDC submittal of 51,975

spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that the oil industry's response plans actually work and match in magnitude the level of oil that can be lost in just one day! We can't be so stupid as not to have learned by our past mistakes. Greed and profits are not an excuse for taking risks when we already know the price that would be paid should such a catastrophic oil spill be repeated!

There is too much at stake to allow aggressive drilling in these one-of-a-kind waters. We are far from having the level of needed important information gathered nor is there a proven plan in place to clean up an oil spill in the Arctic's extreme conditions given the diverse species that would be directly impacted.

If there has ever been a time when caution should be followed, that time is now. Given the aquatic, mammal, and animal diversity as well as ecological importance of the Arctic land and sea environment, this area is unique in so many ways.

Sincerely,
Ms. Kay Woods

Form Letter and representative list of 20,020 concerned citizens submitted by Oceana



Dear Regional Director, Bureau of Ocean Energy Management, Regulation and Enforcement,

Thank you for the opportunity to comment on the Revised Draft SEIS and Lease Sale 193 in the Chukchi Sea. The revised draft supplemental EIS does not sufficiently account for missing information and BOEMRE should not move forward with Lease Sale 193. At a minimum, the agency should suspend the leases sold until the necessary baseline information is available to determine whether drilling activities should occur and, if so, under what conditions. The decisions you make as part of this process will provide important direction for our ocean resources, in particular for Alaska's Chukchi Sea.

The Arctic is one of the most beautiful and forbidding places on Earth, where temperatures regularly plunge well below zero and the time between sunset and sunrise is sometimes measured in months rather than hours. Despite these difficult conditions, a variety of people and animals have adapted to thrive at the top of the world. The Arctic is home to many of our nation's most iconic wildlife species: polar bears, walrus, ice seals, bowhead whales, beluga whales and more. Facing pressures of climate change and industrialization, a bottleneck for survival has been created in the Arctic Ocean, ultimately threatening wildlife and putting Arctic community's subsistence way of life at risk.

Currently, there is no proven method of cleaning up an oil spill in Arctic conditions. There are no trained personnel or equipment in the region capable of carrying out an effective response plan and there is a clear lack of basic scientific information about the ocean ecosystem. The vibrancy and biodiversity of the Arctic ecosystem depends on how we manage future development.

Until issues such as the lack of science and the inability to clean up an oil spill in Arctic waters are addressed, the federal government cannot possibly make informed decisions about whether oil and gas activities should occur in Arctic waters.

Sincerely,
20,020 concerned citizens

Oceana

Form Letter and representative list of 20,020 concerned citizens submitted by Oceana

- Rachael Prokop, Alexandria, VA
- Tatiana Marshall, Washington, DC
- Chris Wrinn, Milford, CT
- Jonathan Dinman, Chesterfield, MO
- Sara Slate, Marmora, NJ
- , Phoenix, AZ
- David Powers, san francisco, CA
- Ha Tang, Annandale, VA
- Lauren Macura, palm bay, FL
- betty Jeane Murphy, long beach, CA
- Amy Lagrone, austin, TX
- Annastacia Fulcher, Palisades Park, NJ
- Sharon Fischer, Granville, NY
- Margaret Neal, Pompano Beach, FL
- Lisa Thompson, Beverly Hills, CA
- Kuniko Oyakawa, Palisades Park, NJ
- Kirsten Massebeau, cannon beach, OR
- Geoff Knight, Palisades Park, NJ
- Amy Anderson, hesperia, CA
- Nancy Meacham, Warren, OH
- Melinda Oldham, Mission Hills, CA
- Eric, Plymouth, MI
- Matteo, Dearborn, MI
- Ann Goldstrin, Chestnut Hill, MA
- Todd Snyder, San Francisco, CA
- Lorelei Stierlen, Plano, TX
- Ganriela almeida, Plainfield, NJ
- David Martin, Canoga Park, CA
- Nuno Correia, Seixal, RI
- Mrs. odette chauve, morangles, IL
- Ian Schmetzler, New Canaan, CT
- Maure Briggs- Carrington, Turners Falls, MA
- Maria MacDonell, Bennett, NC
- Ms. Rute Rodrigues, ,
- Tracy Hasenkamp, Seattle, WA
- Sara Brawley, Aurora, CO
- Carol Curtis, COLORADO SPRINGS, CO
- Lorraine Stepchin, Groveland, MA
- Bob Qu, chagrin falls, OH
- Maria Olshin, Pocono Summit, PA

Oceana

Form Letter and representative list of 20,020 concerned citizens submitted by Oceana

- Ms. Shannon saldana, Loveland, OH
- Victoria Fernans-Moore, Miami beach, FL
- Linda Wells, Moravia, NY
- Herby Martin, BOULDER, CO
- Rick Bassett, ,
- Marissa Myers, Staten Island, NY
- Janaye Estlick Janaye Estlick, Holland, MI
- Deb, bronx, NY
- Taryn Alverson, Waldorf, MD
- James Shawver, Rochester, NY
- Donald Mackay, South Pasadena, CA
- Natasa, ,
- Kerry Marchant, Centerville, MA
- kathleen lopez, ,
- Howard Cohen, Newark, DE
- Yangbo Du, Cambridge, MA
- Jaimy Ras, ,
- Karin Lashkevitch, ,
- Sean, Brooklyn, NY
- Richard Neville, ,
- Joe Watson, Superior, WI
- Caryl McIntire Edwards, South Paris, ME
- Barbara Rose, watertown, MA
- Susan Tucker, Albuquerque, NM
- Ann S. Egge, Roanoke, VA
- Michael Balitaris Fortier, Washington, DC
- Ashley Wetherell, Cary, NC
- Sandy Sanderson, San Francisco, CA
- Vicki Grunwald, Brooksville, FL
- Jaimy Ras, Center Cross, VA
- Bethany Larkin, North Kingstown, RI
- Michael Maffie, Putney, VT
- Anthony Lioi, ,
- Nadejda Simikova, Spassk-Dalniy, CO
- Caitlyn Cathcart, Brooklyn, NY
- Mrs. Carol Carsten, Corpus Christi, TX
- A R, Asbury, NJ
- jill Miller, Berkeley, CA
- Richard DeFazio, Erie, PA
- Anne Peterson, Evanston, IL

Oceana

- Daniel Kirk, Glen Ridge, NJ
- Giorgia, Lugo di Vicenza, AL
- Kenny Patterson, Buford, GA
- Samantha Steigerwaldt, Seminole, FL
- Larry Morton, Kingman, KS
- Jay Braun Brooklyn, Brooklyn, NY
- Albert Mah, Como, Western Australia, NY
- Ally Sharp, Nashville, TN
- Ms. Mary Zawoysky, Woods Hole, MA
- Patricia Gollnick, Duisburg, CT
- Marilyn Shull, Nanty Glo, PA
- DANAT, RIO RANCHO, NM
- Susie Stulz, New York, NY
- Libba Miller, Nashville, TN
- Linda Knadler, ,
- Edith, Old Chatham, NY
- Cyndi Clough, Wichita, KS
- George Politis, Brooklyn, NY
- Rainbow D Di Benedetto, Austin, TX
- Chuck Boyington, Nashville, TN
- Kristin Knowles, Orleans, MA
- Tomasz Mroziński, Three Rivers, MA
- Lauren Klugkist, Washington, DC
- Jonette Bronson, Telluride, CO
- Evelyn, Denver, CO
- Samantha Ginsburg, Pgh, PA
- Adrienne Buchholz, Chicago, IL
- Tiffany Gubala, Laguna Niguel, CA
- Dr Tormod V. Burkey, Oslo, NJ
- G Blouin, Sarasota, FL
- Vanessa Walko, Blackwood, NJ
- John Morgan, Springfield, IL
- Bill Hamm, Mobile, AL
- Ruth Major, Vineyard Haven, MA
- Pati, Phillips, ME
- Danielle Dolleaux, St-Fargeau-Ponthierry, or
- Mr. Mike Rustad, Durango, CO
- Mieke Zylstra, Charlottesville, VA
- Christopher Rabalais, Humble, TX
- Carol Hollenbeck, New York, NY

Oceana

July 7, 2011

Comments on the Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 c/o Regional Director James Kendall
 BOEMRE - Alaska OCS
 3801 Centerpoint Drive Ste. 500
 Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

It has been one of the greatest honors of my life to serve the United States of America as a reservist in the United States Military. For over two centuries, the United States of America has been a beacon of hope for people around the world in need of assistance whether militarily, diplomatically or economically.

Oftentimes, our policies at home make the jobs of our military all the more difficult. Some of these policies are clear; others are more covert. One of the chief concerns facing United States strategic operations today is the need for more energy independence. Policies and decisions that limit the US in its ability to enhance domestic energy production put our military in harm's way. Lease Sale 193 would help to increase United States energy independence. I am writing to urge its approval.

It is no secret that the wars of modern times have been fought on soil currently controlled by those who sustain their power by the production, and sale to the US, of crucial oil reserves. Afghanistan and Iraq are the clearest examples, but recently we have seen outbreaks of violence in Egypt and Libya, as well as other Middle Eastern nations, all of which require the attention, and sometimes the involvement, of United States security personnel.

We possess a valuable resource in this fight on the Outer Continental Shelf (OCS) of Alaska, an area that falls under the regulatory arm of the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). This responsibility, which you have assumed, is an enormous one. You must weigh environmental and societal concerns, while at the same time being cognizant of the dramatic economic benefits that oil and natural gas production could create.

However, even with these great questions to weigh, I am writing today to ask you to consider one more – one that is arguably the most crucial. The approval of Lease Sale 193, and others like it, will decrease our dependence on foreign oil that flows from some of the globe's hottest spots, and in turn, keep our military personnel safe. This is a very personal plea from me, and I trust you will take it in to strong consideration.

On behalf of those of us who serve, I want to thank you for your attention to this issue and my opinion thereon. I look forward to seeing the approval of Lease Sale 193.

Sincerely,

 Mark Palmer
 Army National Guard

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 05, 2011
 Status: Posted
 Posted: July 05, 2011
 Tracking No. 80eb9e82
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0017
 Comment from Tomala Paulson, individual

Submitter Information

Name: Tomala Paulson
Address:
 4823 NE 18th Ave.
 Portland, OR, 97211
Email: tomala3@gmail.com
Organization: individual

General Comment

After the Gulf Oil spill last year haven't we proven that the oil companies are incapable of protecting our environment? The Chukchi area is so harsh and extreme in it's weather conditions that a spill there would not be a matter of if, but rather, when. This area is irreplaceable and irreparable. From my understanding, the Prince William spill still has residual problems to this day and it was no where near as remote or untouched. Yes, we're addicted to oil but this is an incredibly short-sighted response to our problems. Let's put a stop to this foolish give-away of a National treasure.

Representative Form Letters of 9,719 submitted by PEW

Mrs. Karen Frutchey
 1720 Puka St Apt 201
 Honolulu, HI 96822-4499

Jun 24, 2011

Secretary Ken Salazar
 Interior Building, Room 6156
 1849 C Street, NW
 Mail Stop 7229
 Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

As a biologist that served in the response for the deep water horizon oil spill, I have a request that you acknowledge the following concerns.

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be stationed near the drill site. Additionally, a second drilling vessel should be available nearby that is capable of operating in December ice conditions to drill a

Representative Form Letters of 9,719 submitted by PEW

potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic slope is unable to respond to a spill in the nearshore and shoreline in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean and Energy Management failed to determine which of the missing information from the EIS was important to know in order to determine whether, when, where and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale. A modified alternative should be selected that protects marine species and subsistence communities.

Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Mrs. Karen Frutchey

Representative Form Letters of 9,719 submitted by PEW

Ms. Sheri Kuticka
820 Weaver Ln
Concord, CA 94518-3526

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

Before approving drilling in the U.S. Arctic, the administration should implement a plan that protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is proven plan to clean up oil in icy arctic conditions. And considering what happened in the Gulf, I don't think we're ready to drill in the Arctic.

The Arctic is a challenging environment where operators may encounter dense fog, high winds, and freezing temperatures even in the summer months and in the late fall and winter months, sea ice and darkness pose additional challenges. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, the response would be inferior to what happened in the Gulf and that was a major catastrophe. Remember? There are still animals dying in the Gulf due to that spill fourteen months ago. Oil is still present. It is still not cleaned up and you want to drill in the Arctic???

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

Sincerely,
Ms. Sheri Kuticka

Representative Form Letters of 9,719 submitted by PEW

Ms. Audrey Lima
1073 Conover St
Port Charlotte, FL 33952-1408

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

Please, NO MORE. Please.

Sincerely,
Ms. Audrey Lima

Representative Form Letters of 9,719 submitted by PEW

Ms. Wendy Moylan
125e McKnight Rd N
Saint Paul, MN 55119-6653

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

BEFORE allowing exploration to begin, PLEASE ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters.

I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability.

Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be stationed near the drill site. Additionally, a second drilling vessel should be available nearby

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that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic slope is unable to respond to a spill in the nearshore and shoreline in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

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Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Wendy Moylan

Representative Form Letters of 9,719 submitted by PEW

Dr. Nima Rosepiper
62 Stockbridge Rd
Great Barrington, MA 01230-1228

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters.

Please do not go forward with this.

I do not want to see any drilling in Arctic Waters.

Sincerely,
Dr. Nima Rosepiper

Representative Form Letters of 9,719 submitted by PEW

Ms. Teresa Stimpfel
328 Andover Pl
Robbinsville, NJ 08691-3436

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

Repeatedly in energy-related decisions I see the US making decisions without the benefit of science. A case in point is local – the Army Corp of Engineers as the US representative on the Delaware River Basin Commission, voted to release proposed natural gas drilling rules without having initiated or waited for the results of a comprehensive study of the environmental impacts of natural gas extraction on the ecosystems of the Delaware River watershed.

As a Democratic administration I have hoped that science would inform decisions. I am still hopeful that science will become a leading factor in decisions. However I am a former scientific investigator and I know just as you do, that science can't inform decision making if decisions occur before scientific studies are completed.

Now you are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the

Representative Form Letters of 9,719 submitted by PEW

Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be stationed near the drill site. Additionally, a second drilling vessel should be available nearby that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic slope is unable to respond to a spill in the nearshore and shoreline in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean and Energy Management failed to determine which of the missing information from the EIS was important to know in order to determine whether, when, where and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale. A modified alternative should be selected that protects marine species and subsistence communities.

Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Ms. Teresa Stimpfel

Representative Form Letters of 9,719 submitted by PEW

Ms. Julie Unruh
1203 New Jersey St
Lawrence, KS 66044-3357

Jun 23, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

Have you lied to the children on earth, your children? You are now ruining the U.S. Arctic Waters, for what, to make sure we will never have seafood again? I implore you, please do not drill in the Arctic Waters and ruin our Arctic Waters, like you did the Gulf of Mexico.

Sincerely,
Ms. Julie Unruh

Representative Form Letters of 9,719 submitted by PEW

Mr. Randall Abrams
2709 Jeannes Trl
Edmond, OK 73012-4431

Jun 24, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

Current exploration and oil spill response plans submitted for the Beaufort and Chukchi Seas are larger in scope, with planned simultaneous drilling and increased worst-case oil discharge estimates. But they lack many improvements to response capacity and technology to respond to and clean up an oil spill.

Before exploration and spill response plans are approved, the Administration should require that operators have built and tested a containment system in arctic conditions to be stationed near the drill site. Additionally, a second drilling vessel should be available nearby that is capable of operating in December ice conditions to drill a potential late season relief well. Also, operators must be able to provide adequate nearshore and shoreline protection that includes identification of important ecological areas and pre-staged equipment. Currently, the oil spill response organization for the Arctic slope is

Representative Form Letters of 9,719 submitted by PEW

unable to respond to a spill in the nearshore and shoreline in the presence of broken ice.

The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean and Energy Management failed to determine which of the missing information from the EIS was important to know in order to determine whether, when, where and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale. A modified alternative should be selected that protects marine species and subsistence communities.

Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Until and unless the DOI requires oil companies to adequately address the requirements of NEPA in a responsible manner, the American public will continue to bear the costs and burden of petroleum exploration. The American public has subsidized the risks of oil exploration and extraction long enough. It's time for the oil companies to internalize their external costs of doing business. Tell the Republicans and yellow dog Democrats that's the way the free market capitalist system actually works...in a DEMOCRACY!!!!

Sincerely,
Mr. Randall Abrams

Representative Form Letters of 9,719 submitted by PEW

Dr. BD Stillion
Craighead County
Jonesboro, AR 72401 2196

Jun 27, 2011

Secretary Ken Salazar
Interior Building, Room 6156
1849 C Street, NW
Mail Stop 7229
Washington, DC 20240

Subject: Don't Risk a Spill in U.S. Arctic Waters

Dear Secretary Salazar,

As the granddaughter of an Appalachian coal miner and the wife of a former Shell Oil employee, I tell you that coal and oil are resources whose time has come and GONE. They are filthy, dangerous, and hazardous to human health at EVERY stage of development and use; they destroy the environment and leave nothing but grief and destruction in their wake. It is long past time we STOPPED burning any kind of filthy and dangerous fossil-based fuels and grew up to a healthy and SANE relationship to and with the environment upon which ALL OUR LIVES DEPEND. Had we listened to President Carter decades ago, we could be living RIGHT NOW in a cleaner world, and thousands of lives lost-to accidents, disease, oil-based wars, oil-funded terrorism, poor air quality aggravating asthma and lung disease, and on and on--would still be with us, to the delight of their families and to potentially great benefit to the world. Perhaps you could not do anything about the loss of THOSE lives; but unless you take every possible action in your power to encourage--indeed, to INSIST that our culture develop TRULY clean and TRULY sustainable sources of energy, then you will be to blame for future deaths.

The only thing necessary for evil to prevail is for good people to do nothing. Please, do what is right--even if it is difficult. Indeed, ESPECIALLY if it is difficult. Do your duty; see to it that the world is left a BETTER place for your having served in the privileged position which you now hold.

You are considering important decisions regarding the future of offshore drilling that will set a precedent for oil and gas exploration in U.S. Arctic waters. I do not want the administration going forward without critical information on the ecosystem and on industry's spill response capability. Before approving drilling in the U.S. Arctic, the administration should implement a comprehensive, science-based plan that includes local indigenous knowledge and protects ecologically important habitats in the U.S. Arctic Ocean. And before allowing exploration to begin, you should ensure there is the spill response capacity proven to clean up oil in icy arctic conditions.

Improve Exploration and Oil Spill Response Plans

The Arctic is a challenging environment where operators may encounter

Representative Form Letters of 9,719 submitted by PEW

harsh conditions year-round, such as dense fog, high winds, and freezing temperatures even in the summer months; in the late fall and winter months, sea ice and darkness pose additional challenges. These conditions increase the risks of a potential spill and would likely hamper oil spill response. Given the lack of infrastructure to support a significant spill response, the remote location of the lease sites and the challenging weather, potential Arctic operators must be equipped to contain and clean up an oil spill with the resources they bring.

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The Revised Draft Supplemental Environmental Impact Statement (DEIS) is Not Sufficient

The Bureau of Ocean Energy Management failed to determine which of the missing information from the EIS was important to know in order to determine whether, when, where and under what conditions to issue oil and gas leases before conducting the Chukchi 193 lease sale in 2008. Oil and gas activities could have significant impacts on marine life (such as bowhead whales, walrus, ice seals and fish), yet this is not fully considered in the DEIS. The DEIS should be revised to incorporate the recently completed U.S. Geological Survey science review on the Arctic Ocean to help address missing information that would have informed which areas should have been included in the 2008 lease sale. A modified alternative should be selected that protects marine species and subsistence communities.

Fully informed decisions regarding the Arctic Outer Continental Shelf require balancing potential resource extraction and development with maintaining the ecological integrity of the ocean.

Sincerely,
Dr. BD Stillion

Comments on Revised Draft SEIS
Lease Sale 193 Chukchi Sea
Regional Director
Bureau of Ocean Energy Management
Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820
RECEIVED
JUL 11 2011
DIRECTOR, ALASKA OCS
MANAGEMENT SERVICE
ANCHORAGE, ALASKA

You are commenting on an Other:
BOEMRE calls for public comment on Revised Beaufort Sea Exploration Plan (EP) and associated Oil Discharge Prevention and Contingency Plan (ODPCP) (BOEM-2011-0066-0002)

INFORMATION
First Name: Diane
Last Name: Provost
Mailing Address: 645 G St
Mailing Address 2: Apt 672
City: Anchorage
Country: United States
State or Province: AK
Postal Code: 99501
Email Address: provd1@gmail.com
Phone Number: 907-349-6745
Fax Number:
Organization Name: an Individual
Government Agency Type:
Government Agency:

COMMENT
I am a citizen of the U.S. concerned about the hampering of the US Oil and Gas industry by over-regulation by our federal agencies.

The TAPS pipeline is 2/3 empty and declining. The U.S. has resources and shouldn't be importing billions of dollars worth of oil while exporting tens of thousands of American jobs to foreign jurisdictions.

Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future investment.

Lease Sale 193 must be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.

Sincerely,
Diane Provost
Diane Provost

Mr. James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

June 20, 2011

Dear Mr. Kendall;

I certainly hope that you support offshore drilling for Alaska!

As a WW11 veteran that spent several years at Ladd Air Force Base at Fairbanks I came to appreciate the beauty and vastness of the State. I don't think that offshore drilling per Lease Sale 193 Chukchi Sea will adversely affect Alaska's charm.

Since gas prices, mostly based on foreign sources, surged past \$4 per gallon recently the USA should develop its own resources to avoid international difficulties that might drive gas costs even higher.

Additional benefits that can be attributed to Alaska's off shore oil drilling include: creating a multiplicity of jobs, primarily, in Alaska; adding billions of tax revenue dollars to both state & nation; and most importantly muting the wild gas price rises created by disruptions to foreign sources.

To conclude I hope this has helped you to recognize the impact that your vote will have on energy security and job opportunities for your state and the nation. Please support offshore drilling for Alaska.

Sincerely,
G. T. Ray
Gordon T. Ray
26 Pinecrest Plaza
Southern Pines, NC 28387

RECEIVED
JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MANAGEMENT SERVICE
ANCHORAGE, ALASKA

2 July 2011
RECEIVED
JUL 11 2011
REGIONAL DIRECTOR, ALASKA OCS
MANAGEMENT SERVICE
ANCHORAGE, ALASKA
Directors
We urge you to start & support Alaskan off-shore drilling exploration in the Chukchi Sea. The U.S. needs to AND should find & utilize its domestic supply of energy. Such policy will create jobs, produce tax revenue and produce oil supplies to keep the Trans-Alaskan Pipeline from shutting down permanently.
George & JoAnn Rebore

Representative Form Letters from Defenders of Wildlife 48,000 comment letters

June 22, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Dr, Ste 500
Anchorage, Alaska 99503-5823



RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

I am writing to express my support for Lease Sale 193. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

As you well know the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. We must stop relying on oil from countries like Saudi Arabia, Libya and Venezuela.

In conclusion, I believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources without further delay and obfuscation. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

Ernest R. Reese
4120 S 118th RD
Bolivar, MO 65613-8231

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 10, 2011
Status: Posted
Posted: July 11, 2011
Tracking No. 80ebe750
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0056
Comment from Christopher Burley, Defenders of Wildlife

Submitter Information

Name: Christopher Burley
Address:
1130 17th Street NW
Washington, DC, 20036
Email: cburley@defenders.org
Phone: 202-772-0220
Organization: Defenders of Wildlife

General Comment

Please find attached more than 48,000 comments from Defenders of Wildlife supporters regarding the Revised Draft SEIS, Lease Sale 193 Chukchi Sea. Many of these individuals signed on to a version of the text below, however some chose to personalize their comments.

"As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions.

The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important.

Furthermore, the government has admitted that no technology exists to clean up a spill in the

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Page 2 of 2

Representative Form Letters from Defenders of Wildlife 48,000 comment letters

Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets.

The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement.

The Arctic's rich marine environment is one of the least understood areas in the world..." (comments continue)

Attachments

071011_chukchi_dow_comments-1

Representative Form Letters from Defenders of Wildlife 48,000 comment letters

John
. Barbeta
55 Echo Bay Dr
Excelsior
MN
55331-9577

As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior must not move forward with decisions about drilling before it has critical missing information. The revised draft Supplemental Environmental Impact Statement for Chukchi Lease Sale 193 shows that very large oil spills could occur from drilling in the Chukchi Sea. If such a spill does occur, it could have catastrophic effects on the region's species, such as the iconic polar bear as well as birds and whales. An oil accident like the one Exxon created last week in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters, until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake. Thank you.

Renee
A'Brial
203 Hill Rd
Elizaville
NY
12523-1324

As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil

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Representative Form Letters from Defenders of Wildlife 48,000 comment letters

created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Sunday
Abbott
524 Heather Dr
Virginia Beach
VA
23462-4569

I URGE YOU TO REJECT SHELL OIL'S DANGEROUS PLANS TO DRILL OFF THE ARCTIC COAST. IT IS OBVIOUS FROM PREVIOUS DISASTERS THAT WE DO NOT KNOW HOW TO HANDLE A MAJOR OIL SPILL. IT IS A NO-BRAINER TO ALLOW SHELL TO DRILL. As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior must not move forward with decisions about drilling before it has critical missing information. The revised draft Supplemental Environmental Impact Statement for Chukchi Lease Sale 193 shows that very large oil spills could occur from drilling in the Chukchi Sea. If such a spill does occur, it could have catastrophic effects on the region's species, such as the iconic polar bear as well as birds and whales. An oil accident like the one Exxon created last week in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters, until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake. Thank you.

Jeff
Adams

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161 Nola Dr
Holden
MA
01520-2633

As a concerned member of the public, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Vonna
Alexander
PO Box 1048
Nags Head
NC
27959-1048

I AM ANGRY THAT SUCH DRILLING IN THE ARCTIC IS EVEN BEING CONSIDERED given the proven irresponsibility of the oil companies and their related contractors to develop the technology for an immediate containment and clean up in case of a spill. As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that NO DRILLING takes place in Arctic waters before a plan is in place to gather essential information and there is MANDATORY AND PROVEN technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency MUST TAKE these concerns SERIOUSLY and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior MUST NOT move forward with

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decisions about drilling before it has critical missing information. The revised draft Supplemental Environmental Impact Statement for Chukchi Lease Sale 193 shows that very LARGE OIL SPILLS COULD OCCUR from drilling in the Chukchi Sea. If such a spill does occur, it could have catastrophic effects on the region's species, such as the iconic polar bear as well as birds and whales. An oil accident like the one Exxon created last week in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. PLEASE DO NOT ALLOW the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters, UNTIL IMPORTANT INFORMATION IS GATHERED AND A VALID PLAN IS IN PLACE TO CLEAN UP AN OIL SPILL in the Arctic's extreme conditions. There is too much at stake. Thank you.

Mary-Ann
Allen
113 Koornhof Road
Meadowdale
MA

1609
Has shell not damaged the earth enough!! Leave God's creatures & their land alone!!As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Kathryn
Andre
2021 McCarthy Rd
Ames
IA
50014-7821

As Exxon demonstrated just this past week, the oil companies have not yet learned how to protect the environment. Either that, or the bottom line is important enough to justify only half way investing in protecting the environment. They talk the talk, but you have to admit, they damage the environment often, and in BIG ways. As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the

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Rosalind
Andrews
942 Scenic Dr
Knoxville
TN
37919-7638

RIGHT NOW OIL HAS SPILLED IN YELLOWSTONE NATIONAL PARK AND IS CONTAMINATING THE RIVER. AND YOU WANT TO ALLOW SHELL TO DRILL WHERE????????As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior must not move forward with decisions about

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Teri Apodaca
PO Box 725
Ben Lomond
CA
95005-0725

I am a supporter of Defenders of Wildlife, and a protector of Nature and Mother Earth. It's time to stop destroying our planet and everything on it. I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Chara Armon
309 Dogwood Ln
Wallingford
PA
19086-6007

America's people, animals, and natural environment do NOT need any further drilling or any further drilling disasters. Renewables are our solution now. As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the

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Carla Arneson
PO Box 336
Ely
MN
55731-0336

We need alternatives not more drilling. Stop the oil monopoly and put the money supporting it into research. As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. The Department of Interior must not move forward with decisions about drilling before it has critical missing information. The revised draft Supplemental Environmental Impact Statement for Chukchi Lease Sale 193 shows that very large oil spills could occur from drilling in the Chukchi Sea. If such a spill does occur, it could have catastrophic effects on the region's species, such as the iconic polar bear as well as birds and whales. An oil accident like the one Exxon created last week in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters, until important information is gathered and a plan is in place to clean up an oil spill in the Arctic's extreme conditions. There is too much at stake. Thank you.

Helen

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Standing
137 ave. Chant d'Oiseau, Brussels
Brussels, 1160
NV
10025-

Dear Mr. Salazar, Please REJECT SHELL's offer to develop endangered wildlife and polar bear regions with wells. They have already caused much environmental harm and are willing to do so many times more. They are crooks. Thank you for REJECTING SHELL's offer. Yours sincerely, Helen Standing ----- As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

David Stassen
330 N Orange Grove Ave
Los Angeles
CA
90036-2136

As an employee of the government, you work for me, a citizen, and not for big oil. As a concerned member of the public and a supporter of Defenders of Wildlife, I'm writing to urge you to protect polar bears and other Arctic wildlife by ensuring that no drilling takes place in Arctic waters before a plan is in place to gather essential information and there is proven technology to clean up a spill in the Arctic's unique conditions. The original environmental analysis for Chukchi Lease Sale 193 was rejected by a federal court because of its failure to fill critical data gaps, yet the revised draft Supplemental Environmental Impact Statement still does not remedy these errors. As the agency well knows, Shell Oil is pursuing an aggressive drilling plan in the Beaufort as well as the Chukchi making the environmental analysis for the rugged and pristine Chukchi sea all the more important. Furthermore, the government has admitted that no technology exists to clean up a spill in the Arctic's volatile sea ice environment. As you consider all proposed activities in the Chukchi and Beaufort Seas, I urge you to ensure that there is more to the oil industry's response plans than just glorified mops and buckets. The Presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. The agency must take these concerns seriously and address them in its final Environmental Impact Statement. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic

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Marc Stein
15220 Steinbeck Ln
Colorado Springs
CO
80921-3529

Come on Ken. We just had the Deep Water Horizon disaster and then the Yellowstone disaster. What does it take to convince you that these oil companies cannot be trusted to use our natural resources in a responsible manner. Thank you.

Karl Zimmerman
156 Columbia Dr
Amherst
MA
01002-3127

Have you ever seen a heroin addict looking for his next hit? It's not a pretty sight. He'll act out violently, threatening his wife and kids. He'll steal, he'll attack. He'll do whatever he thinks he needs to do to get drugs. Drugs that will ruin his body; that are ruining his life. He'll do anything, even though the next syringe-full might kill him. That's what I think of when I hear about plans to drill for oil in the Arctic. Global warming is what makes this drilling feasible -- the carbon we've dumped into the air from our prior use of oil, coal, and natural gas has warmed the Arctic, melting the summer ice and all but eliminating the thick perennial winter ice. We know this has happened. We're already suffering consequences: more severe weather events, drought in the south and midwest, loss of trees in the Rockies and Sierra Nevadas from beetle damage. The oceans are becoming more acidic. It takes half a century for the sea to reach equilibrium with carbon concentrations in the atmosphere. We can measure the change in acidity, yet what we see represents equilibrium with atmospheric carbon from 1961. Krill populations are declining and coral reefs are bleaching now. What will be the damage in 50 years? And yet we can't seem to restrain ourselves from looking for our next hit. Shell is seeking permits to drill ten wells in shallow Arctic water -- wells that are possible because of global warming; wells that will provide us with more oil to burn, more carbon to emit. Yet the House wants to hamstring the EPA, and won't even consider meaningful caps on carbon emissions. How can we stop this insanity? I strongly urge you to make a start now. Reject Shell's drilling plans for the Arctic. Start to send Big Fossils a new message: We can quit. We won't keep buying their harmful product. We are ready to help ourselves; to put ourselves on a healthier path. Thank you.

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buzz
alpert
7220 N Keeler Ave
Lincolnwood
IL
60712-2021

Alternative energy sources must begin to inject themselves into our lives so that we do not continue to destroy pristine areas of our habitat that can never be replaced even with thousands of years of healing. Please do not allow Shell to drill in the Arctic. Thanks, Buzz As a concerned member of the public and a supporter of Defenders of Wildlife, I oppose the proposal to allow Shell Oil to drill ten wells in the coastal waters of the Arctic over the next two years. The national commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response. Yet Shell Oil is barreling ahead with plans to begin new operations in the Arctic as soon as next summer. The Bureau of Ocean Energy Management, Regulation and Enforcement is currently considering an aggressive drilling plan that would allow Shell to drill ten wells in the coastal waters of the Arctic over the next two years. But these waters provide vital habitat for threatened polar bears, endangered bowhead whales, imperiled walrus and other sensitive wildlife. An oil accident -- like the one ExxonMobil created recently -- in the Yellowstone River or last year's BP Deepwater Horizon tragedy would be truly disastrous here. The Arctic's rich marine environment is one of the least understood areas in the world. There is a lack of basic science -- from simple species counts of marine mammals such as the threatened polar bear and the endangered bowhead whale to information about currents and tidal systems. As of now, there is no effective way to de-oil a polar bear should tragedy strike as it too often does. And Shell has yet to demonstrate the ability to implement a clean-up in such remote and icy waters. For all of these reasons, I strongly urge you to reject Shell's drilling plans for this special area. Thank you.

Ralph F. V. Haven R. Rumpf

6036 Legion Road
Stevensville, MI 49127-1110
July 5, 2011

James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall,

I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC projection is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

The Administration's "Energy Policy," or at least what appears to be a policy, is to cripple energy production of all types at home and make more arrangements for imports. The President sees to be laboring under the false assumption that if we help develop their exploration capabilities, they will remain our suppliers. This is very dangerous ground to tread. And while most people agree "Green Energy" is a possibility, it still remains in the future. It makes no sense to cut off nearly all energy production in this country while we wait for someone else to develop an alternative. America should be leading the way on research and development while slowly decreasing our dependence on traditional energy resources. I fear the path the administration is currently on is madness and will lead to an economic catastrophe.

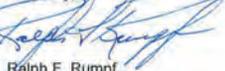
With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and

Page 1 of 1

Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

In conclusion, I believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,



Ralph F. Rumpf

As of: July 25, 2011
Received: July 04, 2011
Status: Posted
Posted: July 05, 2011
Tracking No. 80eb93fd
Comments Due: July 11, 2011
Submission Type: Web

PUBLIC SUBMISSION

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements: Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0016

Comment from Mark Sabol, PhD, N/A

Submitter Information

Name: Mark Sabol, PhD

Address:

6231 S. Bell

Tacoma, WA, 98408

Email: marksabol@hotmail.com

Phone: 2062436362

Organization: N/A

General Comment

Dear protectors of the public trust,

The idea of allowing oil extraction in the location of Oil Lease Sale 193 is ludicrous. What does it take for us to learn? The most fundamental natural resource of all, upon which we DEPEND as a species, is our oceans. They (key life-forms there) are already shown to be at increasing risk due to climate change, over-fishing, and factors still not identified (pollution a likely culprit).

Existing technology, and technology in the foreseeable future, is simply inadequate to even BEGIN to make a claim that this sale is anything less than a recipe for disaster.

To allow this sale would be irresponsible in the worst sense of the word. Do YOU want to be the ones we point back to when the question is asked: WHO approved this? PLEASE take Oil Lease Sale 193 OFF the auction block.

Thank you for your consideration and responsible public service in this matter.

Sincerely,

Mark Sabol, PhD
Tacoma, Washington

3509 Post Oak Road
Garland, Texas 75044-6567
21 June 2011



James Kendall, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Comments on Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Mr. Kendall:

Currently, the United States imports roughly half of the crude oil that it consumes. And that has been amid a recession that has tempered demand significantly. Still, according to the Energy Information Administration, the United States will consume over 19 million barrels per day of crude oil and liquid fuels in 2011, up 140,000 barrels per day from the year before. Further, U.S. demand is projected to increase by an additional 170,000 barrels per day in 2012, while global demand is forecast to increase by 1.4 million barrels per day and 1.6 million barrels per day in 2011 and 2012, respectively. At the same time, U.S. oil production has dropped slightly in 2011 while OPEC production is slated to increase significantly in comparison to non-OPEC production. Clearly, the United States is overly reliant on foreign imports of a commodity that is critical to our nation's economic health.

With these facts in hand, it is imperative that BOEMRE allow America to develop its abundant energy resources, especially those in Alaska's Outer Continental Shelf. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. Relying on oil from countries like Saudi Arabia, Libya and Venezuela not only places the United States at risk for disruptions in supply and price spikes; it also supports repressive and anti-American regimes.

Therefore, I am writing to express my support for Lease Sale 193 as well as my appreciation for the thorough review the Bureau of Ocean Energy Management, Enforcement and Regulation (BOEMRE) has undertaken. I believe this latest Revised Draft Supplemental Environmental Impact Statement (SEIS) thoughtfully addresses the concerns raised about the potential for a very large oil spill and rightfully concludes the risk is minimal. Now that Lease Sale 193 has been fully reviewed, I urge the BOEMRE to finalize the SEIS and allow the development of these vital resources to proceed.

In conclusion, I believe the BOEMRE must move efficiently to finalize this process and allow the development of our domestic resources. At a time when global energy security is increasingly affected by supply disruptions and political unrest, the United States must do all that is possible to bolster its energy security.

Sincerely,

John D. Sage

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 11, 2011
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Posted: July 11, 2011
Tracking No. 80ebfeb3
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Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0094
Comment from Michael Satre, self

Submitter Information

Name: Michael Satre
Address:
9356 Turn Street
Juneau, AK, 99801
Email: msatre@alaskaproducers.org
Organization: self

General Comment

I have reviewed the SEIS regarding Lease Sale 193 and find that it sufficiently and substantially addresses all potential impacts of activities that would commence upon the approval of these leases.

The exploration and potential production of oil and gas from these areas are critical to the future of Alaska and these activities should no longer be held hostage to a never-ending "what-if" analysis.

This lease sale should be affirmed as it was originally in 2008.

Thank you,

Michael Satre
Juneau, Alaska

Katherine Schake Comment

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 05, 2011
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Posted: July 06, 2011
Tracking No. 80eb9fab
Comments Due: July 11, 2011
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Docket: BOEM-2011-0044
Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0018
Comment from Katherine Schake, None

Submitter Information

Name: Katherine Schake
Address:
4709 SE 64th Ave
Portland, OR, 97206
Email: kaschake@yahoo.com
Phone: 503-568-2794
Organization: None

General Comment

I have had the incredible fortune to travel through much of the Arctic this summer for work, observing it from both the ground and the air as I map the Alyeska Pipeline. It is an incredibly harsh, breath-taking landscape. There are people who live here, throughout the North Slope and on the coast of the Chukchi Sea, surviving subsistently off of the sea ice while highly valuing their way of life.

Daniel, a native Inupiat from Barrow, shared his perspective at the public hearing in Fairbanks and his story shook me to my core. Most of us do not know what it is like to come from a traditional culture, one that nurtures a relationship to the land and sea. His is a lifestyle that is hard, but balanced. To hear the passion with which he spoke about his home...it was powerful to witness that such cultures are still alive in the U.S. The SEIS was written by folks in Washington D.C. who have never lived in the Arctic. Their plan for an oil spill clean-up relies heavily on air support, when there are no airstrips anywhere near close enough to be effective. The winds and weather are so violent at times that simply accessing an oil boom in the Chukchi Sea would be impossible, let alone cleaning up a spill. Not to mention that it is completely dark for months on end- the sun simply does not rise. We are fooling ourselves if we think we would be able to clean up an oil spill in the middle of the Chukchi Sea-

Katherine Schake Comment

we simply don't have the skill to do this. One thing I've learned working in a technological field: no matter how great our technology is, it will still break down. We cannot assure that an oil spill would not occur, let alone foresee all consequences that an oil drilling operation in the midst of sea ice may have for the natives who depend on this ecosystem for their existence. Please do not drill for oil in the Chukchi Sea.

As of: July 25, 2011
Received: July 07, 2011
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Posted: July 07, 2011
Tracking No.: 80ebc530
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Submission Type: Web

PUBLIC SUBMISSION**Docket:** BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0024

Comment from Melody Schake, Individual

Submitter Information**Name:** Melody Schake**Address:**849 Evergreen Circle
Burnsville, MN, 55337**Email:** mlschake@hotmail.com**Phone:** 651-206-8961**Organization:** Individual**Government Agency Type:** Local**General Comment**

Please do not drill in the Chukchi Sea as we don't have the technology to immediately stop and clean up a spill should one occur. Please learn from what happened in the Gulf. Protecting the delicate balance of nature and the lives of the people who live in the region is far more important than feeding our oil dependent lifestyles. We can shed our cars and rely on public transportation. That is the right and responsible thing to do.

Thank you.

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Douglas Smith Comment**PUBLIC SUBMISSION**

As of: July 25, 2011
Received: July 10, 2011
Status: Posted
Posted: July 11, 2011
Tracking No.: 80ebe555
Comments Due: July 11, 2011
Submission Type: Web

Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0040

Comment from Douglas Smith, None

Submitter Information**Name:** Douglas Smith**Address:**15827 Noble point
Anchorage, AK, 99516**Email:** dsmith@lrs-ak.com**Phone:** 907 349-2931**Organization:** None**General Comment**

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

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Douglas Smith Comment

- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water.

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Lori Stepansky Comment

PUBLIC SUBMISSION

As of: July 25, 2011
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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0041
 Comment from Lori Stepansky, ARWC

Submitter Information

Name: Lori Stepansky
Address:
 510 Glacier Bay Circle B
 Anchorage, AK, 99508
Email: alcanlori@gci.net
Phone: 907-222-7501
Organization: ARWC

General Comment

I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy – not less. The United States continues to import oil from unstable and adversarial countries despite the vast

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Lori Stepansky Comment

North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0060
 Comment from BILL STEVENS, citizen

Submitter Information

Name: BILL STEVENS
Address:
 P.O. BOX 8596
 NIKISKI, AK, 99635
Email: casscon1@acsalaska.net
Organization: citizen

General Comment

BILL STEVENS
 P.O. BOX 8596
 NIKISKI, ALASKA 99635
 July 11, 2011
 Comments on Revised Draft SEIS
 Lease Sale 193 Chukchi Sea
 Regional Director
 Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

Sir or Ma'am,

I believe that OCS Lease Sale 193 should be affirmed as held in 2008. Sufficient information and analysis, as provided by the SEIS, is available to support Sale 193.

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It is of paramount importance for Alaska's economy, National economy, and National Defense that Sale 193 be affirmed.

The Chukchi Sea will likely be a major supplier of energy for the United States in the future and ease our importation of oil from undesirable foreign sources.

Thank you.

Bill Stevens

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PUBLIC SUBMISSION

As of: July 25, 2011
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 Posted: July 01, 2011
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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0010
 Comment from Peter Stokes, Self

Submitter Information

Name: Peter Stokes
Address:
 3521 Andree Drive #A
 Anchorage, AK, 99517
Email: stokes@gci.net
Organization: Self

General Comment

Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species. The North Slope and the offshore are the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas. The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow. An estimated annual average of 54,700 new jobs would be created and sustained over 50 years by OCS-related development in Alaska. As estimated \$63 billion in payroll would be paid to employees in Alaska as a result of OCS development.

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Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0096
 Comment from Paul Tengan, UAF (retired); personal

Submitter Information

Name: Paul Tengan
Address:
 Box 315
 Ester, AK, 99725
Email: pstengan44@yahoo.com
Organization: UAF (retired); personal

General Comment

The full ramifications of exploration and development in the Chukchi Sea still needs further study.

As the permanent northern polar ice cap continues to shrink, it is inevitable that new shipping lanes through and across the Arctic Ocean will evolve. This can only further complicate the migratory and feeding patterns of marine and sea bird life across the whole area.

Climate changes are likely to continue; this will further affect the weather and sea ice flow patterns. Can there be ANY proper planning and preparation for disasters when these factors have yet to develop and be studied?

It is already known that the climate and weather in the area can be extreme. During the war in the early 1940s, it is on record that the military --on both sides-- LOST MORE equipment from WEATHER EVENTS than enemy action! How much more severe weather would anyone expect north of the Bering Strait?

Oil and gas reserves are already known to exist, and are yet to be developed, onshore on Alaska's North Slope and near coastal areas. It would be totally foolhardy to explore and develop resources on the fragile OCS prior to development in these immeasurably safer areas.

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Representative Form Letters of 19,890 submitted by The Wilderness Society

July 11, 2011

Dr. James Kendall, Regional Director
 BOEMRE Alaska OCS Region
 3801 Centerpoint Dr., Ste. 500
 Anchorage AK 99503-5820

RE: REVISED DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR LEASE SALE 193 (OCS EIS/EA BOEMRE 2010-034)

Dear Dr. Kendall:

Enclosed is a CD with comments from 19,890 people on the Revised Draft Supplemental Environmental Impact Statement for Lease Sale 193. We thank you for accepting these comments from interested members of the public throughout the country and look forward to seeing them considered.

To assist you in reviewing these comments, we have provided them in two files, one with letters from members and supporters who have edited our letter in some fashion so they are not duplicates from a template and another file with unedited letters.

If you have any trouble accessing or importing the information on the CD, please contact our Online Communications department at 303 650-5818 x116 for further assistance.

Sincerely,



Lois N. Epstein, P.E.

cc: Michael R. Bromwich, Director, BOEMRE

Representative Form Letters of 19,890 submitted by The Wilderness Society

Ms. Anne Lazarus
 524 E 20th St Apt 2g
 New York, NY 10009-1340
 (212) 673-9059

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walrus, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized. How can you even consider drilling in the Arctic after knowing all the risks and irreversible damage? We need to reduce the use of fossil fuel. A decision to drill in the Arctic is just a donation to the coffers of the greedy oil industry.

Sincerely,
 Ms. Anne Lazarus

Representative Form Letters of 19,890 submitted by The Wilderness Society

Ms. Doris Lynch
3618 E Park Ln
Bloomington, IN 47408-6303
(812) 332-5043

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

I lived in Arctic Alaska for one year and know well the vulnerability of the land-tire tracks last more than a hundred years--and how much the native people and wildlife rely on a clean habitat.

After the destruction and pollution of the Gulf oil spill, we must not drill in such a vulnerable remote place until we are absolutely sure we can do it without harm.

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

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A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized.

Sincerely,
Ms. Doris Lynch

Representative Form Letters of 19,890 submitted by The Wilderness Society

Ms. Grace Neff
800 28th Ave SE
Albany, OR 97322-4177
(541) 928-8508

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized.

A spill in these waters would be many, many times worse than the Gulf spill which will take years to repair even in these warmer waters. We still don't know the extent of damage done there.

Sincerely,
Ms. Grace Neff

Representative Form Letters of 19,890 submitted by The Wilderness Society

Mr. Seth Bensek
16 The Byway
Ithaca, NY 14850-2719
(607) 257-8126

Jul 1, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

We have no idea how to clean up an oil spill in the Arctic Ocean, and the more we drill up there, the more likely we are to have one. Our dependence on foreign oil should be addressed through conservation (like increased CAFE standards for cars and trucks), not extremely risky offshore drilling in the Arctic, with disastrous consequences when the inevitable spill occurs.

So please, do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized.

Sincerely,
Mr. Seth Bensek

Representative Form Letters of 19,890 submitted by The Wilderness Society

Mrs. Pat Pascual
1216 Route 311
Patterson, NY 12563-2823

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges hypothetically is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. Now is the time to take proper precautions and ensure that drilling is done only after we have confidence that spill risks are minimized.

There should be an independent inspector making sure everything is done right and he or she should be there as long as any drilling is being done. There should also be an inspector to check on the inspector every month or so to make sure he is doing his job and not being paid off.

Sincerely,
Mrs. Pat Pascual

Dr. Tim Tarbell
3765 Mayfair Dr
Los Angeles, CA 90065-3208

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans.

Sincerely,
Dr. Tim Tarbell

Ms. Heidi Jackson
10006 W 61st St
Merriam, KS 66203-3214
(913) 362-8853

Jun 29, 2011

Interior Secretary Ken Salazar

Subject: Comments on the Revised Draft SEIS, Lease Sale 193 Chukchi Sea

Dear Interior Secretary Ken Salazar,

The Arctic Ocean is home to hundreds of thousands of marine animals, including seals, walruses, whales and polar bears, and is depended upon by Native villagers for food.

Please do not allow drilling in ecologically-critical Arctic waters before basic essential information is gathered and there are proven technologies to clean up spills in the Arctic's icy waters. The Presidential Commission on the BP Deepwater Horizon tragedy specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Additionally, the recent US Geological Survey analysis of the ocean's science needs concluded that further research should take place before drilling in the Arctic Ocean, including establishing a baseline scientific understanding. With this in mind, it is clear that exploratory drilling resulting from Lease Sale 193 in the Chukchi Sea should be postponed until there is a better understanding of the Arctic Ocean.

The Arctic Ocean is too special a place to risk with incomplete data on the ocean's marine resources and poor spill response plans. The oil in the Arctic Ocean isn't going anywhere, and can wait for proper research and preparedness.

A Deepwater Horizon-scale oil spill which the Bureau of Ocean Energy Management, Regulation and Enforcement acknowledges is possible - would be catastrophic for the Arctic Ocean and the wildlife and people that depend on it. It would be impossible to clean it up. Now is the time to take proper precautions and do the required scientific research. Even wells that are for exploration -- not production -- still pose threats to the fragile Arctic Ocean habitat. Do not allow drilling.

Sincerely,
Ms. Heidi Jackson

Page 1 of 1

PUBLIC SUBMISSION

As of: July 25, 2011
Received: July 06, 2011
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Posted: July 07, 2011
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Docket: BOEM-2011-0044

Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001

Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0026

Comment from James Thomson, N/A

Submitter Information

Name: James Thomson

Address:

2534 SE 31st Ave
Portland, OR, 97202

Email: abcjlt@gmail.com

Organization: N/A

General Comment

The isolation and extreme climate of the Chukchi Sea make it nearly impossible that an accident or spill could be effectively contained or cleaned up. Oil spills in active drilling areas are not a question of "if," but rather of "when?" Pack ice, darkness for months on end, extreme cold, and lack of access by plane or ship make clean up of an inevitable accident a technological challenge for which no one is prepared.

The revised SEIS shows a lack of understanding of this area and the unique environmental challenges of working there.

Ms Genie Tillisch
308 Thaxton St
Gaithersburg, MD 20878-5720
(301) 947-4310

Jul 8, 2011

EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale:

How can the Obama Administration even consider allowing new oil drilling anywhere near water? Considering BP's ability to clean up its mess from the Deepwater Horizon disaster, I don't think the oil industry has put enough/any of its profits into researching/developing new technology for clean ups after oil spills. If BP can't clean up its mess in the Gulf, where it is nice and warm, how is Shell going to clean up its mess in the Arctic?

I just heard on the news that Exxon makes 5 million dollars profit per hour, 24 hours a day, 365 days per year. PROFIT. Yet they cannot clean up their disgusting leak into the Yellowstone River, ongoing currently. Let us not forget that other little oil spill Exxon produced, the Valdez... still not truly cleaned up.

Why? Because it doesn't matter how much money you have, oil spills do not respond adequately to money being thrown at them. They are stubbornly resistant to the persuasions of money. That's why there is no miracle technology; that's why the oil industry doesn't waste its time developing said technology, because it will never exist.

Just forget about filthy, dirty, 20th century fossil fuel and let's put our money, energy, research, new technology into clean energy sources. Oil companies should be required to put 25% of their profits into clean energy, so they can become the energy companies of tomorrow, but of a kinder, gentler sort.

COME ON, GET REAL!!!

Sincerely,

Genie L. Tillisch

Genie Tillisch

Please - no new permit for oil drilling until the gas company has proven it can clean up 100% of all leaks. jt

Scott Widness Comment

PUBLIC SUBMISSION

As of: July 25, 2011
 Received: July 11, 2011
 Status: Posted
 Posted: July 11, 2011
 Tracking No. 80ec0149
 Comments Due: July 11, 2011
 Submission Type: Web

Docket: BOEM-2011-0044
 Alaska Outer Continental Shelf Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Comment On: BOEM-2011-0044-0001
 Environmental Impact Statements; Availability, etc.: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Document: BOEM-2011-0044-0128
 Comment from Scott Widness, Fugro

Submitter Information

Name: Scott Widness
Address:
 5761 Silverado Way
 Suite O
 Anchorage, AK, 99518
Email: swidness@fugro.com
Phone: 907-561-3478
Fax: 907-561-5123
Organization: Fugro

General Comment

I am writing in support of the revised draft Supplemental Environmental Impact Statement (SEIS) for the 2008 Chukchi Sea lease sale. This new SEIS—three years in the making—answers not only the technical issues cited by Judge Ralph Beistline in his July 2010 ruling, but also the potential impacts of a theoretical “worst case” oil spill.

As it now stands, the SEIS provides a clear path forward to responsible development in Alaska’s Outer Continental Shelf (OCS). This path is a long-time coming. Oil and gas exploration in the Alaska OCS dates back to the early 1980s. The company I work for, in fact, provided numerous surveying and geotechnical projects to aid in these activities. Industry drilled more than 30 exploratory wells during this time, including five wells in the Chukchi; all without incident.

This prior experience underscores a couple of important points. First, the Alaska OCS isn’t “uncharted territory” as some would argue. Rather, industry has a proven record of success working in these waters, even without the advanced surveying and drilling technology available

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Scott Widness Comment

today. Second, while the region poses unique challenges, it is not inherently more dangerous or difficult than other offshore locations. The risks are simply different.

In developing the revised SEIS, government has identified the unique challenges of offshore exploration in the Chukchi and has formed rigorous stipulations that will ensure the safety of the ocean environment and coastal communities. Let us adopt these regulations and lead other Arctic nations in responsible development. Doing so could help refill the Trans Alaska Pipeline System, create nearly 55,000 new jobs over the next 50 years and provide billions of dollars for the federal treasury.

Thank you for considering my comments.

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World Wildlife Fund

Page 1 of 1

29 Letters received from the World Wildlife Fund On July 14, 2011

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

The future of America's Arctic Ocean may be decided as soon as this summer. I'm writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up a spill in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

Consider that the Arctic's rich marine environment is one of the least understood in the world. There is a lack of basic science--from simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems. The Department of Interior (DOI) must not move forward with decisions about drilling before it has gathered critical missing information--including the potential impact of an oil spill on the life in the Arctic Ocean ecosystem.

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish. DOI must fill such data gaps before making any leasing decisions.

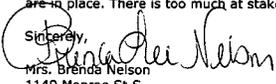
Consider that the Inupiat people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks at a time on the water, hunting to feed their families and their communities. The Arctic Ocean is their chief food source, and we must protect it for future generations.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea. This analysis shows that such a spill could have catastrophic effects on the region's species, such as the iconic polar bear, birds, and whales.

And finally, consider that even BOEMRE's predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic's volatile sea-ice environment.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America's Arctic Ocean. And I urge you to ensure that the oil industry's response plans are sufficient to meet the challenges of a spill in the Arctic.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

 Mrs. Brenda Nelson
 1149 Monroe St S
 Shakopee, MN 55379-2066

We should not be rolling the dice in this area. The price could be way too high if we are unprepared. Do the right thing.

https://secure2.convio.net/vwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+... 7/8/2011

Katherine A. Wilken
 22750 McManus Drive
 Chugiak, AK 99567

July 11, 2011

Comments on the Revised Draft SEIS - Lease Sale 193 Chukchi Sea
 c/o Regional Director James Kendall
 BOEMRE - Alaska OCS
 3801 Centerpoint Drive Ste. 500
 Anchorage AK 99503-5820

Re: Revised Draft Supplemental Impact Statement for Lease Sale 193

Dear Mr. Kendall:

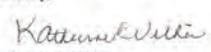
On behalf of myself, Katherine A. Wilken, I would like to express my strong support of oil and gas development in the Chukchi Sea and other areas of Alaska's Outer Continental Shelf (OCS) and to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to finalize the environmental review process and move forward with Lease Sale 193. I appreciate the opportunity to submit a public comment on the revised Draft Supplemental Impact Statement, released by BOEMRE on May 20th. Lease Sale 193 has undergone exhaustive environmental review, and the potential environmental impacts have undergone a very lengthy and thorough analysis. Oil and gas development in the Chukchi Sea can and should be done safely, and it is past time for the government to proceed with Lease Sale 193 so that Americans can fully realize the energy and economic benefits increased domestic energy production can bring.

Offshore oil and gas development in Alaska will strengthen our energy security, create jobs in Alaska and across the country, and generate significant government revenue. With a conservatively estimated 27 billion barrels of oil and 132 trillion cubic feet of natural gas, energy production on Alaska's OCS is critical to our country's long-term energy supply. It is estimated that economic activity from the development of the Chukchi and Beaufort Seas would create an annual average of 54,700 jobs nationwide. Government revenue generated from the Chukchi Sea is estimated to be nearly \$50 billion over the next fifty years. The benefits of energy production on Alaska's OCS cannot be overstated; development of our domestic energy resources is an asset to the entire economy.

In order to achieve greater price stability for consumers, America needs more energy -- not less. The United States continues to import oil from unstable and adversarial countries despite the vast North American resources available. We are forced to rely on oil imports, which put the United States at greater risk for disruptions in supply and price spikes. Volatile energy prices hinder economic growth and make it extremely difficult to do business. But expanding our domestic production will increase our energy supply and help meet growing demand. For that reason, we strongly support moving forward with Lease Sale 193.

Upon conclusion of this public comment period, I respectfully request that the lease-holders be allowed to move forward with planned exploration and production. I appreciate BOEMRE's attention to this important matter and look forward to safe and responsible energy production in the Chukchi Sea.

Sincerely,


 Katherine A. Wilken



Ms. Becky Kocis
6042 Lisbon Ct
Palmdale, CA 93552-4009
(661) 285-0685

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,

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Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely,

Becky Kocis
Ms. Becky Kocis

Please do not approve drilling in the Arctic. We need to protect one of our nation's greatest natural resources from a potential and devastating oil spill. This is a cost-prone place that wildlife and Alaska natives call home.

Mrs. Carol Scott
1016 E Laurel Ave
Glendora, CA 91741-2946
(626) 430-7414

July 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear Regional Director, Bureau of Ocean Energy Management, Regulation & Enforcement, Alaska OCS Region:

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Sincerely,

Mrs. Carol Scott
Mrs. Carol Scott

P.S. Please do not drill here until a specific plan is written for cleaning up an oil spill. We do not want another BP oil spill. An oil spill in that magnitude would destroy a pristine area in the Arctic and probably never recover. This area is priceless!

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Mrs. Jennifer Butler *JButler*
1223 Hellene Dr
Wilmington, NC 28411-7284
(910) 796-6769

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Mrs. Laurie Puca *Laurie Puca*
16 Thornwood Dr
New City, NY 10956-3412

Ms. Anne Gorozdes
1052 Dunbarren Rd
Glen Burnie, MD 21060-7039

Jul 8, 2011

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If we do not have a way to quickly clean up an oil spill in the Arctic, then we should not be drilling there. It's as simple as that!

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Sincerely,


Ms. Anne Gorozdes

Mrs. Kara Weimand
1800 114th Ave SE
Bellevue, WA 98004-6946
(425) 943-8252

Jul 7, 2011

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Sincerely,


Mrs. Kara Weimand

Jul 7, 2011

Regional Director, Bureau of Ocean Energy Management,
Regulation and Enforcement, Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

To Whom It May Concern:

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely, 

Mother Raphaela
144 Bert Washburn Rd
Otego, NY 13825-2265
(607) 432-3179

Jul 7, 2011

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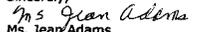
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Ms. Jean Adams
4193 Osage St
Sweet Home, OR 97386-3136
(541) 367-1488

MONICA DUCLAUD

Jul 7, 2011

EIS: ALASKA OUTER CONTINENTAL SHELF REGION, CHUKCHI SEA PLANNING AREA, OIL AND GAS LEASE SALE

Dear EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale.

The future of America's Arctic Ocean may be decided as soon as this summer. I'm writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region.

Consider that the Arctic's rich marine environment is one of the least understood in the world. There is a lack of basic science--from simple species counts of marine mammals (for example, threatened polar bears and endangered bowhead whales) to information about currents and tidal systems.

Consider that the National Marine Fisheries Service has told the Bureau of Ocean Energy Management Regulation and Enforcement (BOEMRE) that it should obtain more information about the effects of oil and gas activities, especially seismic testing, on fish.

Consider that the Inupiat people have lived off the bounty of the Arctic Ocean for thousands of years, traditionally spending weeks at a time on the water, hunting to feed their families and their communities.

Consider that as part of the revised draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Lease Sale 193, BOEMRE conducted an analysis which shows that very large oil spills could occur from drilling in the Chukchi Sea.

And finally, consider that even BOEMRE's predecessor agency, the Minerals Management Service, previously stated that no technology exists to clean up a spill in the Arctic's volatile sea-ice environment.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America's Arctic Ocean.

Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place.

Sincerely,

Ms. Monica Duclaud

340 Divisadero Street #203, San Francisco, CA 94117
PH: 415 6731500 • FX: 415 507-3700
duclaud@wwf.com • www.wwf.org

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Ms. Leslie Valentine
21 E 18th St
Huntington Station, NY 11746-2940
(631) 423-7404

https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+... 7/7/2011

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Ms. Maria P Crisci-Munafa
9519 156th Ave
Howard Beach, NY 11414-2828

World Wildlife Fund

7/8/11 3:39 PM

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Ms. Kelly Ryan
296 Dekalb Ave
Brooklyn, NY 11205-3733
(310) 451-4339

Mrs. Carrie Mack
16340 Wayne Rd
Livonia, MI 48154-2262
(734) 779-4770

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Mrs. Carrie Mack

ecosystem. No drilling! There is no fool proof plan that can work. Learn from past mistakes + don't drill. It's not worth it. Thank - You -

Miss Danielle Westman
17746 Palo Verde Ave
Cerritos, CA 90703-2667

Jul 7, 2011

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Sincerely,

Miss Danielle Westman

Mrs. Donna Jowett
32 Barker St # 2
Bellows Falls, VT 05101-1552

Jul 8, 2011

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Jul 7, 2011

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Ms. Liz Palmeri
5521 Whiteleaf Ct
Las Vegas, NV 89149-6646

Jul 8, 2011

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Sincerely,
Jennifer McCreery
Mrs. Jennifer McCreery

Please consider what a tragedy it would be to have such a pristine environment contaminated by an oil spill. We cannot know the far-reaching effects of such an accident. Thank you, Jennifer

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,
Mr. Lawrence Thompson
Mr. Lawrence Thompson
945 N Serrano Ave Apt 205
Los Angeles, CA 90029-3277
(310) 987-5060

I know I speak for millions of Americans who are trying to send you letters in saying to please protect one of the last beautiful, pristine, important environmental ecosystems in the world, both for ourselves + future generations. There are hardly any beautiful, amazing animals left in their natural habitats on planet Earth. At what point will we stop destroying them if not for whales + polar bears in the Arctic? Thank you.

<https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+...> 7/8/2011

World Wildlife Fund

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,
Dr. Norma Hamilton
29001 Boyce Rd
Punta Gorda, FL 33982-8344

Thank you for your attention!

Jul 7, 2011

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Sincerely,
Betsy A. Leonard
Mrs. Betsy A Leonard
71 River View Pl
Parachute, CO 81635-9641

<https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+...> 7/7/2011

29 Letters received from the World Wildlife Fund On July 14, 2011

Jul 7, 2011

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Please do not allow the oil industry to move forward with aggressive, risky plans to drill in these one-of-a-kind waters until the necessary information is gathered and feasible spill cleanup plans are in place. There is too much at stake.

Sincerely, 

Mr. Michael Nielsen
1001 South Rd
Lisle, IL 60532-2652
(630) 362-5848

<https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+...> 7/7/2011

29 Letters received from the World Wildlife Fund On July 14, 2011

Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Ms. Anastaciya Yakovenko
3430 sw 26ct
Fort Lauderdale, FL 33312

Dear EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,

The future of America's Arctic Ocean may be decided as soon as this summer. I'm writing to ask that no decisions about drilling in Arctic waters be made before a plan is in place to gather basic and essential information about the potential environmental impact of an oil spill in this region. Furthermore, decisions should be withheld until proven, accessible technology exists to clean up a spill in the Arctic's unique conditions. The presidential commission on the BP Deepwater Horizon disaster specifically concluded that there are "serious concerns" and "special considerations" regarding Arctic drilling and oil spill response.

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Sincerely,


Ms. Anastaciya Yakovenko

Please take an action and save nature.

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Jul 7, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Ms. Maren Rosmorduc
10929 Huntwick St
Highlands Ranch, CO 80130-6998

Dear Regional Director,
I'm writing to ask you to please hold off on any decisions regarding drilling in Arctic waters. I would hate to see another "Gulf Oil Spill" in our wonderful arctic waters. Thank you.
Maren Rosmorduc

29 Letters received from the World Wildlife Fund On July 14, 2011

Sam and Karen Naifeh
2059 New Brunswick Drive
San Mateo, CA 94402

Jul 7, 2011

Regional Director, Bureau of Ocean Energy Management,
Regulation and Enforcement, Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,

Karen Naifeh
Ms. Karen Naifeh

Please, for all our sakes.

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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It is beyond my comprehension...after the oil spill in the Gulf of Mexico, the break in the oil pipeline in Montana...it is obvious that man is unable to contain and maintain oil in a more habitable environment, much less in such a harsh environment as the arctic.

What is it that these people do not understand? Do they not have enough money? Is their goal in life to pollute and destroy as much of this precious earth as possible in their lifetime?

Where do we "draw the line"? It is my opinion that plain ole common sense demands that we step back and review the situation. It is, without a doubt, that there will be tragic oil polluting event. This earth and its waters do not need more damage. Man has done enough already.

Before BOEMRE considers any drilling in the Arctic Ocean, including Shell's plans in the Chukchi for 2012 and 2013, more environmental analysis must be completed. This missing information is an essential component of a much-needed plan to conserve and manage America's Arctic Ocean. And I urge you to ensure that the oil industry's response plans are sufficient to meet the challenges of a spill in the Arctic.

<https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+...> 7/8/2011

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Sincerely,

Yvonne Martin
Mrs. Yvonne Martin
5 Odd Bits Ln
Asheville, NC 28806-7711
(828) 251-1741

*Act in in your power to protect the water -
do not let pressure from greedy companies
sway you or influence you. Be strong!
Think of the kind of world you want your
children to inherit!*

<https://secure2.convio.net/wwf/site/Advocacy/EIS%3B+Alaska+Outer+Continental+Shelf+...> 7/8/2011

Jul 8, 2011

EIS; Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

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Sincerely,


Ms. Carolyn Smith
1101 Grogan Rd
Stoneville, NC 27048-8434
(336) 573-2903

Jul 8, 2011

EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

To Whom it May Concern:

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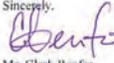
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Sincerely,


Mr. Clark Renfro
Salina, KS



THE SISTERS OF ST. FRANCIS OF PHILADELPHIA

July 8, 2011

EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale

Dear EIS: Alaska Outer Continental Shelf Region, Chukchi Sea Planning Area, Oil and Gas Lease Sale,

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Sincerely,


Kathleen Parisi, OSF

609 South Convent Road • Aston, PA 19014-1207
610-558-7713 • Fax: 610-558-5357 • E-mail: msdgest@osfphila.org
Visit our website: www.osfphila.org

Mr. Hector Orozco
2316 Avenue H
Apt 1616
Grand Prairie, TX 75050-2765

Jul 7, 2011

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Sincerely,



Mr. Hector Orozco

P.S. I know you have the power to protect our environment.
Please listen to my voice and the voices of all people who want a
better place to live. Thank you.

Draft SEIS

Public Hearing Transcripts

Point Hope

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Wainwright

Barrow

Anchorage

Bureau of Ocean Management Regulation and Enforcement

Public Hearing

Environmental Impact Supplemental Statement

Relating to Chukchi Sea Sale 193

November 2, 2010

Point Hope Library

Point Hope, Alaska

VOICE CHECKED/CORRECTED

BOEM TEAM MEMBERS:

Jeffery Loman, Deputy Regional Director
Michael Haller, Community Liaison
Michael Routhier, NEPA Coordinator
Bob Peterson, Senior Geologist
John Callahan, Public Affairs Officer
Mary Cody, Wildlife Biologist
Sharon Warren, Program Analysis Officer

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PROCEEDINGS

THE REPORTER: On the record, 7:06 p.m.

(On the record at 7:06 p.m.)

JEFFERY LOMAN: Good evening and welcome -- thank you very much for taking your time to attend our meeting. Again my name is Jeffery Loman J-E-F-F-E-R-Y L-O-M-A-N -- I am the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, Alaska Region. We'd like to start this meeting with introductions. But first, Dorcas if you would be so kind to say a blessing for us -- we would appreciate that.

DORCAS ROCK: Stand up please. (Blessing given in Native language.) Amen -- thank you.

MR. LOMAN: Thank you very much Dorcas. To make it easier for the court reporter who is memorializing this hearing, I'd like to go around the room, starting with Earl, and have you introduce yourself and spell your name. Hopefully, then we'll only do it once as we exchange information and communicate.

EARL KINGIK: Earl Kingik, Native -- I'm a member of the Native village of Point Hope. I work out there -- Environmental Liaison for Alaska Wilderness League. And I started working with Alaska Wilderness League a few months back. Now I'm the Native Liaison for Alaska Wilderness League, in which we take tribal members to Washington D.C. -- anywhere they have any kind of meeting like that -- thank you.

MR. LOMAN: Earl, could you spell your last name please?

MR. KINGIK: K-I-N-G-I-K.

DORCAS ROCK: Dorcas Rock -- I'm working for (indiscernible) as a Subistent Advisor. And I have to go to the meetings whether I like it or not. But it was good to see you again. Thank you.

MORRIS OVIOK: My name is Morris.

MR. LOMAN: R-O-C-K, right?

MS. ROCK: Uh-huh (affirmative)

MR. LOMAN: Last name is R-O-C-K.

MR. OVIOK: My name is Morris B. Oviok O-V-I-O-K. I'm born and raised here at Point Hope. I don't associate myself with -- I'm a past member of Tribal Council before.

COURT REPORTER: Okay. Could you spell your last name for me again?

MR. OVIOK: O-V-I-O-K.

COURT REPORTER: I'm sorry.

MR. OVIOK: O-V-I-O-K.

GEORGE KINGIK: I'm George Kingik, a member of the Native Village of Point Hope, also with the City of Point Hope. I'm also with the History and Culture -- with the History -- Language and Culture with the North Slope Borough. I'm a Commissioner. And I have known Jeff too and his bosses. The reason why I'm here -- back in the time when you guys celebrated and it was a disgrace to me and my community when you had that

1 big cake. So you're going to be hearing some few things from me
2 as a member of the tribe and also a community member.
3 COURT REPORTER: Could George spell his last name please?
4 MR. GEROGE KINGIK: My last name is K-I-N-G-I-K.
5 COURT REPORTER: Thank you.
6 KAREN WEBER: Karen Weber, one b.
7 COURT REPORTER: K-A-R-E-N?
8 MS. WEBER: Uh-huh (affirmative).
9 COURT REORTER: W-E-B-E-R?
10 MS. WEBER: Uh-huh (affirmative).
11 COURT REPORTER: Thank you.
12 RICKY NASHOOKPUK: My name is Ricky Nashookpuk.
13 COURT REPORTER: Spell your last name.
14 MR. LOMAN: Spell it please.
15 MR. NASHOOKPUK: N-A-S-H-O-O-K-P-U-K.
16 COURT REPORTER: N-A-S-H?
17 MR. NASHOOKPUK: O-O-K-P-U-K.
18 CCOURT REPORTER: Thank you.
19 MR. LOMAN: Yes.
20 KEN PAUL: Ken Paul -- P-A-U-L.
21 COURT REPORTER: What was your first name?
22 MR. PAUL: Ken, K-E-N.
23 COURT REPORTER: Thank you.
24 AGGIE L. FRANKSON-HENRY: I'm Aggie L. Frankson-Henry
25 tribal member.

KRON ASSOCIATES
1113 W. Fireweed Lane, Suite 200
Anchorage, Alaska 99503
(907) 276-3554

1 RAYMOND ATTUNGANA: I'm Raymond Attungana.
2 COURT REPORTER: Could you spell your last name?
3 MR. ATTUNGANA: A-T-T-U-N-G-A-N-A.
4 COURT REPORTER: Thank you.
5 MR. LOMAN: Okay real quick we'll introduce ourselves
6 starting with John.
7 MR. CALLAHAN: My name's John Callahan -- I'm the Public
8 Affairs Officer with the Alaska Region and I'm fairly new with
9 the Agency and the (indiscernible).
10 JUDY BRADSHAW: I'm Judy Bradshaw -- I'm the court
11 reporter for tonight.
12 MIKE HALLER: Mike Haller -- I'm the new Community Liaison
13 with the Agency.
14 ROBERT PETERSON: I'm Robert Peterson -- I'm a Geologist
15 with the Agency.
16 MIKE ROUTHIER: I'm Mike Routhier -- I'm a NEPA
17 Coordinator with the Agency.
18 MARY CODY: Mary Cody -- I'm a Wildlife Biologist with the
19 Agency.
20 SHARON WARREN: Sharon Warren -- I'm a Program Analysis
21 Officer.
22 TIM HOLDER: Tim Holder -- I'm from the Washington D.C.
23 Office -- I'm the only one of our members here that's from that
24 office in Anchorage and Liaison from Headquarters to the
25 (indiscernible).

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1 MR. LOMAN: Okay we'll try to go quickly. But if anybody
2 has any questions, just stop me and I'd be happy to answer them.
3 Two more members -- real quick folks if you could before you
4 sign in -- introduce yourself for the court reporter and spell
5 your last names.
6 RONALD OVIOK: I'm Ronald Oviok -- (indiscernible) Point
7 Hope Tribal Member.
8 COURT REPORTER: Could you spell your last name please?
9 MR. OVIOK: O-V-I-O-K.
10 COURT REPORTER: A-K?
11 NINA OVIOK: O-K.
12 COURT REPORTER: Thank you.
13 NINA OVIOK: Nina Oviok.
14 COURT REPORTER: Spell your last name.
15 MS. OVIOK: O-V-I-O-K.
16 COURT REPORTER: Thank you.
17 JACK SCHAEFER: Hi.
18 MR. LOMAN: Hi Jack, how are you?
19 MR. SCHAEFER: Winded.
20 MR. LOMAN: Jack could you, for the court reporter,
21 introduce yourself and spell your last name?
22 RACHAEL CANNON: I am Rachael Cannon. C-A-N-N-O-N --
23 Rachael Cannon.
24 MR. LOMAN: Thank you. And Jack Schaefer has just joined
25 us.

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1 Okay. So our primary purpose tonight is to take your
2 comments on a draft Supplemental Environmental Impact Statement
3 that we've prepared. As I think almost everyone knows, the
4 Minerals Management Service, now the Bureau of Ocean Energy
5 Management Regulation and Enforcement -- did an Environmental
6 Impact Statement for a oil and gas Lease Sale -- Sale number 193
7 in the Chukchi Sea. Yes ma'am?
8 MS. FRANKSON-HENRY: Why did you change your name from
9 Minerals Management Service to BOEMRE?
10 MR. LOMAN: They changed the name because the Secretary of
11 the Interior wanted to reorganize the Agency.
12 MS. FRANKSON-HENRY: What was the purpose of it?
13 MR. LOMAN: He wants to restore public trust.
14 MS. FRANKSON-HENRY: And was it because of the corruption
15 with Minerals Management Service in the Lower 48?
16 MR. LOMAN: I think that was one of the reasons -- one of
17 many. Yes ma'am. So the Agency did an Environmental Impact
18 Statement for Lease Sale number 193 in the Chukchi Sea. And in
19 February of 2008 they held a Lease Sale in the Chukchi Sea and
20 issued 465 leases, for a total of about \$2.6 billion with Shell
21 Oil Company being the largest holder of leases -- \$2.1 billion
22 worth of leases in the Chukchi Sea.
23 The Agency was challenged in Federal Court and the
24 challenge involved the Agency's compliance with the National
25 Environmental Policy Act or NEPA. And the people that brought

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1 that litigation asserted that the Agency didn't comply with
2 NEPA. And the court found that, with respect to a couple of
3 elements, the Agency did not fully comply with NEPA. And Sharon
4 is going to explain to you that court decision. Sharon.

5 MS. WARREN: Thank you. And thank you for allowing us to
6 come into your community.

7 The court found, on most parts, that we -- that the Agency
8 complied with NEPA. But there was three things that they said -
9 - the court said -- that we had to go back. And we had to do a
10 better job of what we did in the Environmental Impact Statement.
11 And so we failed to analyze the environmental impact of natural
12 gas. There was an incentive for natural gas to put into the
13 leases, but that portion had not been analyzed in the
14 Environmental Impact Statement. So the court says, you have to
15 go back and you have to analyze that.

16 Other things that we failed to do is, we failed to
17 determine whether the missing information that we said in the
18 EIS in a number of places that there was missing information or
19 uncertainty or lacking. The court said that we had to go back
20 and look at that and determine whether or not it was essential
21 to the decision. So we had to go back and look at that. And
22 then we also had to look at if -- if it was essential to the
23 decision, then we had to determine whether or not we could
24 obtain it and what would be the cost of getting the information.

25 So the court ruled July 21st of this year -- 2010 -- the

1 court still has jurisdiction of the case. That means the judge
2 still has the case. And so this Supplemental EIS that we did is
3 because of what the court told us to do. So it's narrow in
4 scope based on the court ruling. Once the EIS -- we're here at
5 public hearings taking comments. The comment period will close
6 the 29th of November. But how this will work is -- once the
7 final EIS is done, it will be filed with the court. And then
8 the parties that sued us -- the Native Village of Point Hope was
9 one of the litigants -- we'll look to see what we did and be
10 able to comment on it through the court -- through the briefs
11 and the court and then the judge will let us know and rule
12 whether or not we met the court remand on that. So that's where
13 we're at with that litigation.

14 So it's still in litigation. And the government has to
15 take a look at this before anything else can be done.

16 MR. LOMAN: Thank you Sharon. Any questions?

17 UNIDENTIFIED FEMALE: Can you explain to our elders of
18 what NEPA is?

19 MR. LOMAN: The National Environmental Policy Act?
20 National Environmental Policy Act is probably the premiere of
21 Federal environmental legislation that does -- it was signed
22 into law by President Nixon and it does a number of things. It
23 forces the Federal government to analyze the effects on the
24 human environment of a major Federal action. In this case, the
25 major Federal action was holding an oil and gas lease sale in

1 the Chukchi Sea -- in your garden -- in your backyard -- in a
2 place where you have subsisted since time memorial. I don't
3 think anyone in the Native Village of Point Hope or any
4 community member of Point Hope would disagree that it was a
5 major Federal action. So this law forces the Agency to analyze
6 the effects to the human environment from that action. And it
7 requires that we do so openly provide, for example, our draft
8 documents for your scrutiny and hold meetings like this and take
9 comments from you on those drafts.

10 And, in addition to that, when it's finalized it has to
11 inform the decision maker, which could be the Secretary of the
12 Interior who is -- sometimes delegates it to the Assistant
13 Secretary of Land and Minerals Management. And he did so in the
14 case of Chukchi Sale 193. I was there in Washington D.C. when
15 they briefed him. Or even the President has, as you probably
16 know from reading the papers, the President himself has made
17 some decisions with respect to what happens in the Arctic
18 involving oil and gas exploration. So it informs the decision
19 maker. It's open to the public. It calls for public
20 involvement and it requires the Agency to do an in-depth
21 analysis of the effects to the human environment. What's the
22 human environment? Subsistence resources -- people -- all
23 natural resources -- the social cultural aspects -- the economic
24 aspects and so on and so forth.

25 UNIDENTIFIED FEMALE: What effects of the Gulf of Mexico

1 oil spill -- is NEPA going to be in court to help those
2 communities along the coast as similar to this that we will be
3 100 percent granted -- that we will be helped by (indiscernible)
4 with effects?

5 MR. LOMAN: Well NEPA requires us to analyze the effects
6 of anything that the Agency intends to undertake. The
7 connection of the -- to the spill in the Gulf and our activities
8 up here -- they're multi-faceted. With respect to NEPA -- worst
9 case -- discharge is something. And a very rigorous analysis of
10 the effects of a spill -- that's gotten heightened interest.
11 And will receive heightened attention in our environmental
12 documents that we do, pursuant to NEPA. But there are other
13 things that came about as a result of that spill.

14 It was the primary driver for the name change -- why
15 you're changing your name. We're changing our name again too,
16 by the way. But I can talk about that later.

17 So we've prepared this draft Supplemental Environmental
18 Impact Statement and Mike was a primary person that prepared it.
19 Mike you want to just describe very briefly what this document
20 contains -- what it sets out to do? Mike.

21 You have a question -- yes sir?

22 UNIDENTIFIED MALE: You mentioned about being a better job
23 next time -- what was that better job for?

24 MR. LOMAN: The court wanted to do a better job --
25 (indiscernible) said you have to do a better job?

1 UNIDENTIFIED MALE: Yes.
2 MR. LOMAN: Do a better job because we didn't analyze the
3 effects of any natural gas that would be developed as a result
4 of these leases. Do a better job of analyzing each and every --
5 and it's 40 pages -- of missing information that the plaintiffs
6 submitted to the court and asserted -- you have all this missing
7 information that you noted in your document -- how can you make
8 a decision with all of this information? So the court was
9 requiring us to do what's called a 1502.22 Analysis.
10 What does it mean when something is missing? I'll give
11 you one example. One of the things that they say in the
12 document is, there is substantial uncertainty with respect to
13 the population structure of the bowhead whale. That's what it
14 said in the Sale 193 EIS -- okay. That was sometime between
15 2004 and 2007. At that point in time, the Scientific Committee
16 with the International Whaling Commission was debating -- is
17 there many stocks amongst the bowhead -- a Bering stock -- a
18 Beaufort stock -- multiple stocks? They settled that argument
19 or scientific debate in 2007. And they decided, these
20 scientists, that there is one stock. Well, our job is to do
21 even more. Is there any significance to it with respect to
22 making decisions to explore for oil, produce oil, produce
23 natural gas if there were multiple stocks? I would say no --
24 there's no context.
25 It doesn't make any difference to us primarily because it

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1 doesn't make any difference to you. The subsistence whalers
2 never differentiated between the bowhead in taking them and
3 hunting them, et cetera. So if the scientist said, there's a
4 Bering stock and there's a Beaufort stock, it wouldn't make any
5 difference to you, so it doesn't make any difference to the
6 decision maker with respect to making decisions to let industry
7 explore for oil. Does that make any sense?
8 UNIDENTIFIED MALE: Because -- .
9 MR. LOMAN: That's one example of 40 pages of things.
10 UNIDENTIFIED MALE: Because one little mistake could
11 become a big problem. Thank you for your answer.
12 MR. LOMAN: So Mike, explain very briefly please the
13 document that we produced.
14 MR. ROTHIER: Sure thing. Most of the document itself
15 pertains to that first item that was remanded by the judge back
16 to us. And that is the natural gas analysis that was missing --
17 yes?
18 UNIDENTIFIED MALE: Could you ask people in here -- how
19 many people see your document?
20 MR. ROTHIER: Sure. How many people have seen the
21 document? And if anyone would like to acquire, you know, copies
22 of the document, we could certainly get those to you.
23 MR. LOMAN: There is one -- for the record -- we have
24 looked for it because we sent it here -- here in the library.
25 Who saw it? And we mailed it to a number of the Native Village

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1 of Point Hope -- to the library here and to a number of other
2 key stakeholders who had asked for the document and others here
3 in Point Hope. The mail is pretty slow even when you send it by
4 FedEx or the fastest means that are available. Go ahead.
5 MR. ROTHIER: Just wanted to -- if anyone would like an
6 extra copy -- you could take this one after the meeting. I'll
7 just need it for a few moments here.
8 So basically again -- the first thing was the lack of a
9 Natural Gas Analysis in the original document. At the time we
10 prepared the original document, we didn't really feel like
11 natural gas development, as opposed to oil development, was
12 really that perceivable. We didn't analyze it. Certain things
13 changed between -- on the issue of that first document and the
14 time that the judge issues his ruling. Judge felt, yeah, we
15 should have analyzed the gas. So that's the first thing that we
16 set out to do, analyze the environmental impacts of natural gas
17 development and production.
18 So to figure out exactly what it was we should analyze,
19 our Environmental Analysis Section consulted with our Resource
20 and Economics Analysis Section. I'm just going to turn it over
21 to our expert Bob here. He can speak to that.
22 JACK SCHAEFER: Before you do -- Jack Schaefer for the
23 record -- S-C-H-A-E-F-E-R. As far as I know, neither the
24 Regional Tribes of the Inupiat Community of the Arctic Slope or
25 the Native Village of Point Hope -- has never seen the 40 page

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1 document that was referred to in regards to missing information.
2 Nor was ICAS -- the Inupiat Community of the Arctic Slope --
3 informed as to what was missing, including the natural gas
4 that's in that Environmental Impact Statement. So I am really
5 confused as to how you got to that point as to, was it the judge
6 that came to an understanding that the natural gas portion was
7 left out or -- and 40 pages, or was he -- or told by
8 representation of those people that were involved with the law
9 suit?
10 MR. LOMAN: The Native Village of Point Hope is a
11 plaintiff. And it didn't --.
12 MR. SCHAEFER: Right. Now was it the judge that made the
13 decision to come up with that criteria for that Environmental
14 Impact Statement, did he come up with that decision by himself
15 or was he told by legal representation of, you know, ICAS and --
16 I'm trying to understand because I was completely unaware that,
17 you know, the natural gas portion was that. And the majority of
18 that Environmental Impact Statement just focuses on natural gas?
19 And I've never seen the 40-page document that regards to what is
20 missing, you know, the information that is missing.
21 MR. LOMAN: That's the plaintiffs -- you're a member of
22 the Native Village of Point Hope.
23 MR. SCHAEFER: Right, right, right.
24 MR. LOMAN: That's your exhibit.
25 MR. SCHAEFER: Right -- exactly.

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1 MR. LOMAN: You went to the court and said here's 40 pages
2 of stuff that this document -- Agency --.
3 MR. SCHAEFER: It wasn't us, though.
4 MR. LOMAN: -- didn't include.
5 MR. SCHAEFER: It wasn't us.
6 MR. LOMAN: Well it wasn't you, Jack. But it was your
7 lawyer that --.
8 MR. SCHAEFER: Right -- right.
9 MR. LOMAN: -- submitted the thing.
10 MR. SCHAEFER: (indiscernible).
11 MR. EARL KINGIK: Excuse me, a point of reference for you
12 -- that Jack continue on? You're here to listen.
13 MR. LOMAN: Sure -- I'm listening.
14 MR. SCHAEFER: So you know we -- we didn't have a real
15 clear understanding what was going on in regards to our
16 representation. They never clearly explained to us what
17 information was missing, you know, and the natural gas portion
18 of that. And nor were we given an opportunity to make a comment
19 in regards to whether or not that document and that conclusion
20 is accurate. And, you know, and to find out later on that it
21 was whittled down to natural gas, you know, was really
22 disturbing for me personally. And I don't know, you know, what
23 the other Council members' interpretation of that is. And I
24 don't know what Native Village of Point Hope's position on that,
25 but we were not -- the Regional Tribe was not told what that

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1 missing information was.
2 We never were consulted on it so that we could get back to
3 the attorneys and say, oh, you left out this, this, this and
4 this and this. Why did you come up with just the conclusion
5 with natural gas like that was the practically the only thing
6 that was there. And given it on the face that -- you know our
7 response is extremely weak. And so, you know, I don't really
8 know how this path was -- was made in regards to what control we
9 had in the court itself and what was being said. We were
10 essentially told by, you know, these lawyers, this is what we
11 want you to do. We want you to give statements to this regard
12 and then we'll take the ball and run with it.
13 And never got back with us regards to exactly, you know,
14 what had taken place and how we felt about that. So, you know,
15 I foresee another stage where we're going to be reviewing that
16 document and saying, you know, where did this really come from
17 and -- providing input as to what is missing, besides the 40
18 pages that we've never seen, you know. And I do hope that you
19 know that legal representation had provided evidence of, you
20 know, that being a -- proven to be seen and reviewed. Because,
21 you know, I -- to this day I haven't seen those 40 pages. I
22 requested it from legal counsel and never received it.
23 Also I've never received the Environmental Impact
24 Statement, even though it was sent by FedEx. I just looked at
25 what was emailed to me and so that's -- you know one thing that

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1 I wanted to indicate because, you know, that document is so
2 small -- it's only 300 pages long -- 143 pages is a question and
3 answer thing in regards to whether a type of puffin or certain
4 type of snow geese that some type of significance and all of
5 that is, you know -- we haven't really reviewed that or, you
6 know, had any feedback as to what was in there and what
7 questions were asked. I don't know if that means anything.
8 But, you know, it certainly was surprising to me to see that
9 most of that document only refers to natural gas. When we were
10 concerned about the professional integrity of those federal
11 employees that had to deal with their report that was submitted
12 for the Environmental Impact Statement that was done in 2007,
13 when they were forced to alter their positions by this
14 supervisor, which resulted in law suit by a non-profit that
15 represented them. And so, you know, there's some confusion.
16 I don't know. I can't speak for the Native Village of
17 Point Hope. I was just speaking for ICAS in regards to that
18 document. And what had taken place through that litigation and
19 what we missed and what we can do as a government to government
20 relationship. I mean, some people would feel comfortable with
21 this done because it did buy time or it will buy time. But just
22 the process of how it was done and how it was handled is
23 somewhat confusing. And maybe there was -- the timeframe might
24 have been too short, I'm not sure.
25 MR. LOMAN: Well it's obvious that you read the document

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1 because you saw what's in there. You actively described what
2 you were looking at there. Go ahead, Bob.
3 ROBERT PETERSON: Well, maybe just as an introduction --
4 Jack one of the benefits of --.
5 MR. SCHAEFER: Can you introduce yourself?
6 MR. PETERSON: I'm sorry. I'm Bob Peterson. I'm the
7 Geologist with the Agency that's come up.
8 I was going to say this is one of the benefits that NEPA
9 has is -- we have an opportunity to hear your comments directly.
10 There's no counsel or anyone, you know, between us and you to
11 receive these comments. But, again I'm the Geologist and Mike
12 mentioned in the Supplemental. It is a Supplemental, the oil
13 portion of any of the oil scenario that was analyzed is in the
14 original EIS, the Environmental Impact Statement. So the work
15 we did was just based on gas.
16 The possibility of gas has increased a little bit with all
17 the discussion we've seen of the potential pipeline. But I
18 think the judge was really concerned that there were incentives
19 that -- built into the leases for gas. And we hadn't really
20 analyzed gas.
21 And what we -- in my group have done is come up with a
22 reasonable scenario on what a gas -- oil and gas development
23 would look like. We started with the same oil development --
24 oil is the very more valuable of the two components. Oil would
25 be produced first. There would then be a period after 10 or 15

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1 years -- again this is a scenario so we don't have all the
2 details, but a period where we would see oil and gas
3 development. Well, what would this mean to the area. We would
4 have an additional gas pipeline to shore -- same shore land
5 follows the oil pipeline, gas treatment facilities on shore and
6 a parallel pipeline somewhere, probably across NPRA following
7 the same pathway, the same right-of-way as the oil pipeline.
8 There would be a period of -- our model looks at about 10 years
9 where we have both oil and gas development. And oil would
10 gradually decline and then would be terminated with the
11 continuation for another 10 or so years of gas production alone
12 before the end of the model, as we see it.

13 Yes?

14 MS. FRANKSON-HENRY: Aggie Frankson-Henry, F-R-A-N-K-S-O-N
15 hyphen H-E-N-R-Y. For the record. I was curious, with the Gulf
16 of Mexico oil spill and the disaster that it posed in the nation
17 -- with NEPA that will be here making sure that this doesn't
18 affect our communities along the Arctic Slope. With NEPA being
19 involved with this Act, with the Federal government, will you
20 guys be able to clean up in these pristine waters with the Coast
21 Guard when it's gusting up to 20 to 50 below? Really, you know
22 with that north wind gust -- will you make sure you're there
23 cleaning up that mess, just like the Gulf of Mexico? Will you
24 be willing to cut your hair to make sure that we have enough
25 hair to control the disaster that may be imposed upon us?

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1 MR. LOMAN: Ma'am I'm willing to cut my hair and I will be
2 here. But, I'm not going to lie to you and say that anybody's
3 going to be very effective at cleaning up an oil spill in the
4 worst weather conditions in the Chukchi Sea. And when the
5 Assistant Secretary of Land and Minerals approved, or right
6 before he approved the Chukchi Sea Lease Sale, he asked the
7 question. He asked question first -- he asked, do the people on
8 the North Slope now understand or believe that the oil companies
9 can respond effectively to a major spill after the Secretary of
10 Interior has gone up there and talked to Shell and talked to his
11 people, did all of these things. Do they feel that the industry
12 can respond effectively? Dead silence in the room. Nobody
13 likes to tell somebody what they don't want to hear or they
14 don't (indiscernible). So I've just been up here -- I just met
15 with many folks that are in this room and other people in the
16 communities. And I said, no they don't feel that there is an
17 effective cleanup. And then he asked the question, well can
18 they? And I said, on the worst weather day, no. I put my money
19 on prevention. But on the worst weather day in the Arctic it
20 will be a struggle just to stay alive much less clean anything
21 up. And so, at least he asked the question. And I gave him the
22 best answer which I thought was an honest answer that I could
23 give him.

24 That's what NEPA's about, inform the decision maker. I
25 think it's pretty clear now that when a decision is made to

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1 allow industry to explore, conduct exploratory drilling, that
2 there is a risk. I don't think any President, at least in our
3 lifetime, could honestly get before the country and say, I was
4 assured that it was 100 percent risk free or absolutely safe.
5 It's not risk free and it's not absolutely safe. And we -- it's
6 our job to tell the decision makers the truth, the truth about
7 your concerns and the truth about industry's effectiveness.
8 That being said, because of the Deepwater Horizon spill, Shell
9 has done a lot of things, put extra things in their plan to
10 better respond to a spill. Go ahead.

11 MR. PETERSON: I guess any other questions?

12 EARL KINGIK: Earl Kingik for the record K-I-N-G-I-K. You
13 kind of mentioned the word pipeline.

14 MR. PETERSON: Yes.

15 MR. KINGIK: What kind of recommendation are you doing for
16 our oil pipelines? Are you go into inland or are you going to
17 go through the coast, ocean or --.

18 MR. LOMAN: We support working with the North Slope
19 Borough and --.

20 MR. KINGIK: Are you giving your Impact Statement or maybe
21 --?

22 MR. PETERSON: No, I think when you looked at our Impact
23 Statement -- again this is a scenario. This is -- we don't know
24 where the oil and gas is going to be discovered because the
25 wells haven't been drilled yet. So what we have done is -- done

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1 something that is a reasonable model. You know -- here looks
2 like a good place for some discovery. Based on that, here's
3 where we think would be a reasonable place to come ashore. That
4 could change depending where the actual oil or gas deposit is
5 found. That could change after additional NEPA work,
6 consultation with other governmental agencies -- Tribal
7 agencies, could change for any number of reasons. So, where you
8 have seen it come ashore is just a place where we can draw a
9 line and say, now we have something to study. So those are only
10 recommendations. It is the MMS' policy that we want to see oil
11 and gas pipeline to shore, if possible. And then from there we
12 said, the most reasonable case that we saw was across NPRA. And
13 it would be a gas -- I'm sorry -- an oil pipeline first and then
14 a gas pipeline along the same right-of-way. Did that sort of
15 answer your question?

16 MR. KINGIK: No, it just kind of --. Wondering, because
17 the State of Alaska, you know, got this coastline and North
18 Slope oil, I was wondering how are you going to go to the
19 mainland from your pipeline where you find the oil? How are you
20 going to -- pipe it all the way to Seattle or go the main land
21 of the State of Alaska?

22 MR. PETERSON: The scenario that we had is the most
23 reasonable look would bring a pipeline from somewhere offshore
24 to a shore base across the NPRA over to Prudhoe Bay where the
25 oil pipeline would join up with the TAPS, Trans-Alaskan

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1 Pipeline. And, of course, that terminates in Valdez. And the
2 gas pipeline would go to Prudhoe Bay. And I don't think anyone
3 knows where a gas pipeline, Denali or AGIA, is really going to
4 go. But it would hook up with that facility.

5 MR. KINGIK: In other words, you'll be talking to the
6 Department of Transportation?

7 MR. PETERSON: We would be talking to a number of people,
8 one could be --.

9 MR. KINGIK: You're talking about (indiscernible).

10 MR. PETERSON: Yes. I mean this has a great number of
11 uncertainties. And again I'm going to stress, a scenario is
12 important because we lay out something that is reasonable to
13 give us something to critically analyze.

14 MR. LOMAN: Let me just say, if we run out of coffee,
15 please let us know. We'll make another pot. And there are --
16 there is coffee and some pies and some really good cakes that we
17 got from a charity effort that was taking place at the store
18 today, and it's good. So help yourself, please, to that stuff
19 in the back while we talk. Jack.

20 MR. SCHAEFER: The pipeline that was referred to, that
21 exists now, in 1989 there was an employee that had leaked
22 information that resulted in public knowledge that there were
23 over 200 holes in that pipeline, the Trans-Alaska Pipeline. And
24 this was 1989. And this was essentially kept in a low profile
25 for quite some time since that. And that person was persecuted

1 for leaking that information and making it known. I was
2 wondering -- can, in that Environmental Impact Statement,
3 whether it's a 2007 or this one, was that pipeline looked at as
4 to whether or not it can handle, knowing that condition of that
5 pipeline had exceeded its life?

6 BOEM UNIDENTIFIED MALE: I have no knowledge. Are you
7 talking about the TAPS, the existing oil pipeline?

8 MR. SCHAEFER: Yes.

9 UNIDENTIFIED MALE: No, neither of these documents went so
10 far as to analyze the TAPS. We assume that other regulations
11 from other agencies in all this would ensure that, but we didn't
12 quite get that far in the area that we looked at. We
13 concentrated more on the Chukchi?

14 MR. LOMAN: Between 1989 and now, because of malfeasance
15 associated with TAPS' maintenance, industry has pled guilty or
16 otherwise been found guilty of two misdemeanors and a felony.
17 So the long arm of the law has swung a few times at that kind of
18 negligence. And we're going to assume that that long arm will
19 continue swinging until they maintain that pipeline
20 appropriately and stop behaving like that.

21 MR. SCHAEFER: And this thing that's being developed --
22 there is this law that was passed called the Coastal Zone
23 Management Act, and it dealt with States. And a few years ago
24 Frank Murkowski, who was our Governor, had done something as a
25 Governor of Alaska that caused that Act to be considerably weak

1 in the eyes of stakeholders, voiced through the North Slope
2 Borough to us here in this Village, that they had no way of
3 influencing and addressing concerns that fell under that Act.

4 And, so I'm wondering what Federal laws have been looked
5 at and how our Governor had caused problems with this. And how
6 it affected the North Slope Borough and how it left the Federal
7 government's partner, for lack of a better phrase, to federally
8 recognized tribes which we have this government to government
9 arrangement.

10 And this Coastal Zone Management plan was done by the
11 State of Alaska, with some input by the North Slope Borough
12 which was not passed on to the Tribe whether it be Native
13 Village of Point Hope or the Regional Tribe Inupiat (ph)
14 Community of the Arctic Slope in responding to that particular
15 law and program. And what affect that program has on this
16 project with that critical missing link. It's hard to
17 understand how us, as tribes, with this government to government
18 partnership, forced upon us, arrangement had been pushed aside
19 in favor with the State of Alaska and how they moved forward
20 with this, without our input. And whether or not the State was
21 just as semi-corrupted as the supervisors of the Federal
22 employees that put that document together. We had no real idea
23 as to what this animal was, this Coastal Zone Management program
24 was, other than hearing that it had some mechanism for control
25 and funding for gathering information and trying to come up with

1 solutions. So we were completely left out, the Native Village
2 of Point Hope, the Inupiat (ph) Community of the Arctic Slope.
3 And, how does that affect this process now as to this missing
4 link and --. Are there other tribes in the United States,
5 whether it be the McCaw (ph) Tribe that are, you know, whalers
6 also, or other tribes along the coast that have participated or
7 may have involvement with this Coastal Zone Management program
8 whether it be on an agreement arrangement with their respective
9 States, or whether they had this one-on-one government to
10 government relationship with the United States? You know, we
11 don't know that information.

12 I tried to ask. And I've been having a difficult time
13 from whoever I asked. I guess this question was really never
14 asked. And, whether it's something that is useful, but I feel
15 the act of not involving the Tribes on this is something that is
16 very important, and really needs to be addressed. So I -- I'm
17 still confused on that as to that and how does that play with
18 this, you know, this proposed project that's being presented to
19 us. How does this Coastal Zone Management program play and --.
20 Because we have this government to government relationship.

21 MR. LOMAN: Thank you Jack. Very quickly, because I want
22 to give some folks that have to leave at 8:00 the chance to
23 comment before they have to go. If the Native Village of Point
24 Hope or ICAS, both federally recognized Tribes, feel that the
25 State of Alaska's plan is insufficient, inadequate or they don't

1 agree with it otherwise, we can listen to that and sympathize
2 with you. We have an obligation under Executive Order 13175 to
3 listen to ICAS, is the Native Village of Point Hope. Other
4 affected Tribes tell us why they think our proposed action would
5 be inconsistent with the State's plan. So that should take
6 place if we're doing business the way these Executive Orders and
7 the law tells us to. That may not be enough. But, at least
8 that should happen. Dorcas, you mentioned you needed to leave
9 at eight and maybe some others, so I wanted to give you the
10 opportunity to come, and even though we're not quite to the
11 comment period -- in case you had something to say. Because I
12 know that you wanted to get to another important activity. If
13 there is anyone that needs to comment before 8:00, the floor is
14 open to you. Okay I'm going to give that up -- Earl.

15 MR. EARL KINGIK: For the record, natcsi, N-A-T-C-S-I-Q.
16 Earl Kingik, K-I-N-G-I-K, member of Native Village of Point
17 Hope. First of all, I would like to send my condolences to the
18 family of my cousin. It is very important, knowing him, that we
19 should continue what we are doing of what's going on in our
20 ocean with, we love the most, the garden we treasure. The
21 gardens that keeps our unity together. The gardens that keep
22 our koptchio (ph) way of life together for thousands of years.
23 And he would be very happy that you are here, even though he's
24 gone. Thank you very much.

25 I work as a Native Liaison for Alaska Wilderness League

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1 and we have put something together in which we have attorneys
2 and some geologists. We have some other people. I look at your
3 draft proposal here and we've got -- we have something we want
4 to leave behind here, you know, additional. Shell Oil on
5 October 5, 2010, letter to BOEM asking for approval to drill and
6 explore oil in the Beaufort and not the Chukchi.

7 That is just the point ignored and nothing learned from BP
8 Deepwater Horizon tragedy. BOEM needs to take the time needed
9 to make scientifically justified decisions before allowing
10 leasing and new drilling in the Arctic Ocean. At the minimum,
11 the commentary needs to be extended beyond the November 29th
12 deadline to give communities more time to provide many folks'
13 input of additional scientific studies to be completed.

14 You all heard that North Slope Borough and Shell Oil has
15 signed a Memorandum of Understanding, some kind of agreement, to
16 do scientific studies, and we are aware of that. Chukchi Sea --
17 Chukchi draft SEIS which you've got there, BOEM needs to include
18 information and a new draft SEIS from upcoming USGS and National
19 Commission reports and reassess with scientific information in
20 Appendix A. The 1502-22 analyzed, of the draft, the SEIS
21 obtainable at the (indiscernible) does not (indiscernible).
22 Mission to get -- need to gather some information such as BOEM
23 has done enough draft SEIS. But dismissing, once again, by
24 dismissing the need to gather such information, BOEM, under
25 President Obama, after 24 (ph) Horizon spill is saying the same

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1 thing as MMS under President Bush.

2 That is, no matter what that fact will be -- it be
3 allowed to drill, to proceed. As example that SEIS says that if
4 a large oil spill occurred, scientific significant impact to
5 cetaceans, including whales, could follow. And it is well
6 understood that environmental impact associated with large oil
7 spill could be quite severe, page one and two of 143 and 1502-22
8 analyzed respectively. Yet BOE (sic) still, once again, yet
9 BOEM still choose to proceed with drilling. Once again, yet
10 BOEM still choose to proceed with drilling while Alaska Region
11 of BOEM has stated that it needs to meet the court deadline of
12 January 2011 for its SEIS. The court has carefully -- they
13 imposed no strict deadline in owner required (indiscernible) to
14 file status report with the court if analyze (sic) requires more
15 time.

16 Anxiously, hastily, they issued draft SEIS -- run counter
17 to the law, and Department of Interior recent commitment to an
18 American public. The consequences of rushing through offshore
19 oil and gas drilling approvals without understanding, and this
20 showing to the public and potential impact with tragedies
21 displayed in the Gulf of Mexico.

22 BOEM should not allow the Arctic Ocean, its wildlife, its
23 people to experience a similar disaster. Responsible
24 development needs not to proceed faster and to be justified.
25 Thank you very much.

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1 I had a chance to go down to Louisiana to witness for my
2 first hand (sic). Because what I talk about to my people, when
3 I go to public meeting, is what I see. And we don't want that
4 to happen in my area. It is very sad. Our own government would
5 go pointing fingers of the industry and the industries were even
6 pointing fingers. And we don't want that to happen. We don't
7 fight. We work together we do things together. Thank you.

8 MR. LOMAN: Thank you very much Earl.

9 MR. ROUTHIER: Just to, sort of finish up a few notes
10 about the structure of this Supplemental document. Once we got
11 the analysis, the scenario, from Bob and the rest of the
12 geologists downstairs from us, we turned that scenario over to
13 our scientists, our departmental analysts. And they looked at,
14 you know, the possibility of the offshore pipeline, possibility
15 of on-shore pipeline, possibility of all these natural gas
16 production activities. And they did their environmental
17 analysis of those potential activities. And that's what
18 comprises the bulk of, the body of this document.

19 So, basically we go resource area by resource area, you
20 know, bentic (ph) organisms, marine mammals, subsistence
21 activities, each resource area. And we organize into analyzing
22 the impacts of natural gas development and analyzing the impacts
23 of natural gas production. We also summarized the impacts of
24 the oil production.

25 Basically, that final EIS we did a couple years ago, we

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1 tried to summarize that so the main points are in here so it'll
2 be easier to reference and give context to the gas impacts. So
3 that addressed the first item of the court's remand. The second
4 and third concerns the judge had both pertained to that
5 regulatory requirement, that 1502-22 process.

6 It's all kind of related, so what we tried to do is boil
7 it down into a logical sequential process which our analysts
8 could use to analyze each piece of the incomplete or missing
9 information and see how important they would be. So that
10 process is captured in Appendix A. And I think it's been
11 mentioned here for tonight. It's a rather lengthy Appendix --
12 it's in a very --. I'm sorry, did you have a question?

13 MS. FRANKSON-HENRY: Yes, Aggie Frankson-Henry, for the
14 record, F-R-A-N-K-S-O-N hyphen H-E-N-R-Y. Regarding the
15 analysis of -- would it be possible for you to also get the
16 results and analysis of the Sakhalin Island Shell disaster and
17 the Gulf of Mexico shelf -- disaster of the Deepwater spills and
18 make that public? With your -- with results that may happen
19 with these lease sales, so that things like that will not occur
20 within the environment biologically, geologically. We are
21 impacted even before it starts.

22 MR. LOMAN: Towards -- after the comment period I'm going
23 to -- if you'd like me to tell you -- I want to explain to
24 everybody that cares to listen. The rest of the reasons for the
25 reorganization of our Agency and the other part of the Agency

1 that is yet to come to -- at least officially -- come to
2 existence the Bureau of Safety Environmental -- Safety and
3 Environmental Enforcement, BSEE. And to tell you about the
4 effort that's underway at the direction of the President and the
5 Secretary of the Interior to develop a regulatory agency that
6 will not only restore public trust, but prevent those kinds of
7 disasters that you mentioned ma'am.

8 MS. FRANKSON-HENRY: Will they be able to -- Aggie
9 Frankson-Henry for the record, F-R-A-N-K-S-O-N hyphen H-E-N-R-Y.
10 Will you be able to -- can you put the (indiscernible) -- 100
11 percent, fine and regulate those companies that will buy these
12 lease sales or that have already bought the lease sales before
13 we were undergoing Environmental Impact Statements in our
14 communities -- effective.

15 MR. LOMAN: We'll talk about that when I explain it. With
16 respect to a 100 percent, I think you know the answer to that.
17 The answer is, it's never a 100 percent.

18 MS. FRANKSON-HENRY: We can try though.

19 MR. LOMAN: I agree. Try for 150 but safety and
20 environmental responsibility is done through endless
21 demonstration, not patting each other on the back for our good
22 record. So, I think people are starting to understand that.
23 And I'll talk a little more after we take -- after we get done
24 with the public comment period about what we've recommended that
25 we do to the people who are working on the reorganization. So

1 pretty much a wrap?

2 MR. ROUTHIER: Pretty much all I had.

3 MS. FRANKSON-HENRY: One other comment for the Geologist
4 and the Biologist?

5 MR. LOMAN: Sure.

6 MS. FRANKSON-HENRY: Move forward -- do the right -- do
7 the right thing regardless as to what your colleagues may have
8 against you in documenting these documents -- scientifically,
9 geologically, within the air, the land and the seas and the
10 rivers. Make sure that you stand up for a good purpose. I know
11 you guys have been affected in these -- in your -- within your
12 knowledge. I know that if you say something, they will give you
13 that boldness, BOMRE, used to be MMS. Now they're supposed to
14 change and honor your decision as geologists and biologists that
15 make these studies. So I would encourage you to do the right
16 thing in your -- within your area of expertise.

17 MR. LOMAN: Thank you for that and I really appreciate
18 that because our scientists and our other experts very rarely
19 hear that they have the support of people, especially people in
20 the communities to do the right thing. Thank you.

21 MR. SCHAEFER: There's a mention of reorganization to
22 BOMRE and the BSS or whatever that was, Bureau of Safety and
23 Regulation or something like that. Do you foresee this
24 reorganization following the same path as a BIA realignment that
25 took place in 1989 and where it wound up?

1 MR. LOMAN: No I wasn't working for BIA in '89, but I did
2 work for BIA for ten years. I am familiar with that
3 reorganization. This is really much different. And, you know,
4 sometimes people do things right by accident. That could be the
5 case here.

6 The Bureau -- this vision to restore public trust across
7 all of the agencies that work on offshore oil and gas is the
8 goal, the over arching goal. With respect to the Bureau of
9 Safety and Environmental Enforcement, we have recommended to the
10 people who have been assigned the primary duty to put together a
11 Bureau of Safety and Environmental Enforcement that part of
12 government that regulates the industry.

13 And we said, if you want to restore public trust this
14 Agency must be feared and respected by that industry. Feared
15 and respected. Now when I say feared, I don't mean feared as in
16 oh, we're afraid of them. They're coming, necessarily. They
17 fear and respect together in a way that we did in the Navy. In
18 the Navy Diving EOD Special Warfare communities, we were
19 inspected regularly. Those Inspectors -- inspections came, they
20 were thorough. And it forced you to maintain a very high
21 standard, as people, processes, equipment et cetera, policies,
22 everything.

23 At the same time that was in place, we knew that if there
24 was an accident where people were hurt or killed, they would
25 handpick from the Navy Safety Center the experts to inspect you

1 the most rigorously you could possibly imagine. And no matter
2 how good you were, how well your equipment was maintained, how
3 closely you followed the processes and procedures, you would
4 literally look, and you can get those safety reports online,
5 pull them right off the internet today. Shameful, because when
6 true experts come in and examine every aspect of everything, you
7 will never meet the requirements in full measure. And that's
8 the kind of regulatory agency that is feared and respected.

9 And when this industry, the offshore oil and gas industry,
10 fears and respects this new regulatory agency in that way, then
11 the public trust will be restored when there is someplace
12 towards endless demonstration of safety and environmental
13 responsibility.

14 The people who are in charge of this reorganization agree.
15 And they're working very hard on figuring out how to do that the
16 right way, that's the goal. I hope you share in our desire to
17 support an Agency like that. I think you do. But it's not
18 easy.

19 MR. SCHAEFER: There were statements made by the Secretary
20 of Interior, and others that work with him, indicating that
21 there were changes in the regulations in dealing with oil and
22 gas. I was wondering, was there any consultation with Tribes
23 regarding these changes and does the Native Village of Point
24 Hope know what these changes are? And how these changes
25 addressed in the Environmental Impact Statement and are they

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1 applicable for that statement?

2 MR. LOMAN: They're not addressed in this Supplemental
3 Environmental Impact Statement. This Supplemental Environmental
4 Impact Statement -- there's really one reason why it exists
5 today in draft form. It came from the court remand. The court
6 said, you didn't address natural gas. You didn't appropriately
7 address all of those things in Exhibit 129 -- the missing
8 information et cetera and so forth. And so it supplements the
9 past EIS. Now with respect to changes in regulation that are
10 taking place, I think you're talking about recent notices to
11 leasees (sic), for example -- maybe proposed rule makings,
12 things that the Agency intends to place on industry, correct?

13 MR. SCHAEFER: Uh-huh (affirmative).

14 MR. LOMAN: Okay. No, we here at the Alaska Region -- we
15 haven't consulted with the Tribes that would be most affected.
16 But let me just state a little bit about the need to do that.
17 And I only say that because these are things that the Agency
18 intends to place on industry. There are some elements of Tribal
19 Corporations that are part of that industry, so I will get back
20 to you on that obligation. I'm not saying yes or no, that we
21 need to do it. We certainly are willing to share it with you as
22 you requested, to conduct government to government consultation
23 in compliance with Executive Order 13175. Maybe I'll get back
24 to you on that one.

25 MR. SCHAEFER: Categorical exclusions. That was a rate or

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1 a procedure that was used to get around regulations and
2 requirements. And categorical exclusions has led to some
3 accidents such as the Santa Barbara accident that took place in
4 1969, where the company had requested for a categorical
5 exclusion so that it would only use one single pipe instead of a
6 double, triple, quadruple layered pipe which blew and tore the
7 ground up. And they were never ever able to seal that leak of
8 oil. What is being done with this categorical exclusion that
9 had somehow materialized and was taken advantage by the
10 industry? Does that still exist? Apparently this categorical
11 exclusion gets a 30-day period, and after that there's an
12 automatic approval or something of that nature. What's the
13 status of --.

14 MR. LOMAN: Non-exist --.

15 MR. SCHAEFER: That type of method that's been used in the
16 past?

17 MR. LOMAN: Well that particular categorical exclusion is
18 non-existent with respect to the Bureau of Ocean Energy
19 Management Regulation and Enforcement Alaska Region. And I
20 can't imagine that it will ever exist for any operations in the
21 Arctic.

22 MR. SCHAEFER: As far as I know, there have been
23 accusations that have been made by environmental groups
24 indicating that that categorical exclusions have not been
25 addressed to the public and what was going to done with that as

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1 to whether there's going to be a complete termination of that or
2 what adjustment was going to be made? And so, you know, it's
3 hard for us to know who to believe. I mean, it's easy to
4 believe in an environmental group that has obtained all the fame
5 and stuff. But now we're asking, you know, the Federal
6 government as to where things are with that, because there were
7 categorical exclusions that were issued as a formality,
8 apparently, in the Gulf of Mexico which led to this accident --
9 human error.

10 And, you know, we feel the same in regards to that -- in
11 regards to -- you know the changes and regulations. And that
12 information should be, you know, made available before we even
13 discuss this Environmental Impact Statement, I believe.

14 Were you guys going to make comments? Burt?

15 MR. LOMAN: The categorical exclusion provisions in NEPA
16 are appropriate when the Federal agency has demonstrated and
17 supported administrative record that what they're proposing to
18 do, and do, can be done over and over again without any
19 significant harm to the human environment. Categorical
20 exclusions, to put in real simple form -- if you're going to go
21 around and change out an electrical component on an airport
22 runway. And that's a decision that's made by sometimes the
23 Federal Agency that oversees the maintenance and operations of
24 airport runways. So these kinds of activities are routine.
25 They're done. They don't get in the way of the Endangered

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1 Species Act or Federal Historic Preservation rules and all of
2 these regulatory things that govern actions. And the agency can
3 demonstrate that it's done safely without harm to the human
4 environment. And so they are categorically excluded from
5 further NEPA compliance.

6 Exploration in the Arctic will not be categorically
7 excluded by this Agency, ever. There's a number of reasons for
8 it. The Agency, from within itself, knows that it has to
9 analyze these activities at a minimum with an Environmental
10 Assessment because there are even subtle changes that can and
11 must be looked at, have the potential to get in the way of
12 subsistence activities et cetera, get in the way of sensitive
13 resources and so on and so forth. So that's not going to
14 happen. I can say that with great confidence even long after
15 I'm gone.

16 The other element is there's plenty of will to bring a
17 legal challenge. And I know this much about NEPA. If an Agency
18 tried to do a categorical exclusion for an exploratory drilling
19 operation in the Arctic, and they were challenged they would
20 lose. So there you go.

21 For anybody that joined us kind of mid-course, we are
22 taking comments on a draft Supplemental Environmental Statement
23 that we prepared for Chukchi Sea Sale 193 and the comment period
24 is still open. We're willing to take comments from anybody to
25 hear what you have to say.

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1 MR. SCHAEFER: I have another question before I make a
2 comment. We had, more or less, looked at what is going on
3 around us, what is going on in Russia. What is going on in the
4 United States. What is going on in Canada. What is going on in
5 Greenland and those other countries in the Arctic.

6 And we talked with each other and we looked closely at
7 what is going on in Canada, because they're apparently trying to
8 go through the same path as what we are seeing that's going on
9 here. What I noticed that was somewhat different to a certain
10 point was that Canada had a different type of interpretation on
11 consultation with Tribes.

12 And so there was this court case that had materialized in
13 a ruling that was made by the Canadian Judicial and had
14 indicated that there is a little more -- there is more to a
15 government to government relationship than consultation. And
16 what was within that context was that that consultation was
17 talking with each other, trying to come to a solution.

18 There, the ruling that was made in that court case was
19 that they felt that this government to government relationship
20 was more than just consultation, more than just talking with
21 each other. And in the past, that was essentially what we were
22 doing. And it changed as the Administration changed from the
23 Bush Administration to this Obama Administration. But I really
24 feel that there is more than just talk with consultation. And
25 that there should be some different type of a phrase or language

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1 or term used in dealing with our relationship with each other,
2 that goes beyond just the talk. That something should be done
3 in that regard and that I do expect that adjustment will be made
4 since both Canada and United States are playing this dare --
5 double dare game as to who's going to take that first step and
6 dealing with the risks. What is interesting between Canada and
7 the United States is the Inupiat (indiscernible) back there have
8 already got into an agreement with the industry where they have
9 somewhere along the line of 53 percent interest. More than half
10 of the proceeds from oil and gas will go to their people.

11 But they still have concerns with safety and risk and have
12 not moved forward. Us, we have no arrangement in regards to our
13 oil that is about to be exploited, our oil. Where we see
14 nothing in return other than maybe 40 job positions out of 400,
15 which is the norm of the ratio of hire. So, you know we are
16 looking at other areas and trying to figure out how we're going
17 to move forward, if we are going to move forward. But it is
18 noted that the Inupiat of Canada already have this arrangement.
19 that temptation, that proverbial apple in front of their eyes.
20 And they're not taking a bite out of it until they know for
21 sure. But they're still daring each other as to whether they're
22 going to move forward or not. They still live in that fear like
23 we do now, here.

24 But that is there. We don't have anything. We, as a
25 matter of fact, had to deal with the United Nations Human Rights

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1 Division in 1989 regarding Prudhoe Bay, regarding discrimination
2 against indigenous peoples by transnational corporations,
3 British Petroleum, Atlantic Richfield. And so we've already
4 gone on record in regards to our concerns and how we're being
5 treated in the realm of Human Rights under the United Nations.
6 And that's still ongoing as to how this turns out, has yet to be
7 seen.

8 But you know we are indicating, you know, what we do know
9 which leads to, you know, the comments that we have made in the
10 past since 2007 of the hearings that have taken place and the
11 statements that have been made, the concerns that we have
12 expressed in regards to Federal employees that have their future
13 at risk because of what they were forced to do.

14 Where does that information start and your adjustment that
15 has been made regards to this Court Order that was done by the
16 judge in a remand? Does it start from the time that that
17 supervisor went to the employee and said, you must meet this red
18 face test? If it doesn't then, then you have to readjust your
19 results, your documentation. And we had no idea that any of
20 this was going on. It took them to blow their own whistle to
21 indicate that this was going on and that phrase was used. You
22 know it was really shocking to hear that kind of phrase. But
23 that happened.

24 So where are we on the Environmental, the remand as to
25 what stage is this addressing those concerns we're at, what

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1 point? When we look at that Environmental Impact Statement we
2 see natural gas and then 143 pages of questions and answers as
3 to what type of species are -- you know what is significant and
4 what isn't. How does that play with this remand? They're just
5 going to look at it and hope that, you know, they meet this
6 requirement the way it is now or -- how far back do you go
7 before -- I mean when you go into the supplemental thing, do you
8 go that far back or did you completely skip the employees that
9 were involved and their supervisors? And whether that
10 information is, you know, accurate or not and what is that
11 looked at?

12 Did you go back into your files, your records? I don't
13 know. I don't know who to ask -- so I came in late so I don't
14 know who you are. I just --.

15 MR. LOMAN: I can answer some of that and then, you know
16 Jack, I'm a risk taker. So I'm going to do something you'll
17 never see at one of these meetings. With respect to dissent
18 amongst our people, here's what we believe. If you have an
19 Agency that encourages and fosters dissent -- people that say
20 look, Mr. Big Shot Jeff Loman, Manager guy, who wants to make
21 Headquarters deadlines to get these documents done. We don't
22 think we can do it because we need to know more or study this
23 longer or this wasn't analyzed correctly. That, in the end,
24 when people are right, when they're correct, ends to better
25 analysis and better decisions. It doesn't just work that way

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1 with us. Dissent makes for better decisions in the context of
2 almost everything. So we say to our employees, we want dissent
3 to make better decisions.

4 Mike is a relatively new employee with us. I'm going to
5 let Mike tell you honestly and ask that he do so openly in his
6 analysis because he took -- he did some of this analysis. Was
7 he subjected to anything by management -- supervisors in the
8 organization that forced him to do things in a way he otherwise
9 wouldn't? He can tell you yes or no right in front of
10 everybody. And I hope that he does. So go ahead Mike.

11 MR. ROUTHIER: No, not at all -- and I worked with a lot
12 with the analysts and was busy. I'm more of a coordinator so
13 I'm trying to -- you know help the process and just facilitate
14 the process. Let our scientists give their information and then
15 -- as they call it. And I call the scientists in -- I'll say --
16 I don't think they -- none of them expressed that concern to me.
17 I can only speak from my own experience, though.

18 MR. SCHAEFER: Were you aware that that had happened down
19 there?

20 MR. ROUTHIER: I was -- yeah I was. I don't know many of
21 the details about it, but I understand that that has been a
22 concern in the office.

23 MR. SCHAEFER: And that it did happen, you were aware of
24 it?

25 MR. ROUTHIER: Yes.

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1 MR. SCHAEFER: And that there was a law suit that was
2 filed in New York that addressed that and made it public?

3 MR. ROUTHIER: I wasn't aware of that. But, yeah.

4 MR. SCHAEFER: The Public Employees for Environmental
5 Responsibility was the group that did it. There was expressions
6 of concern by those employees to the environmental groups and to
7 us stakeholders through teleconferences. And we responded by
8 saying that you need to go to the Office of the Inspector
9 General and indicate that. They couldn't figure out how to do
10 that and so they used this organization to do it. And that's
11 essentially what had happened which led to my question.

12 How far back does the document go in regards to that
13 story? Was that looked at or was it completely ignored? I
14 wasn't talking about you know personal, you know, your
15 experience but the events and the facts that were provided. And
16 how far back did it go to review whether or not that information
17 is accurate or not? And, you know, because this all
18 materialized in a Freedom of Information Act request. And so
19 there were internal documents that were acquired through us by
20 direction of legal counsel to try and figure out what was going
21 on. And this essentially -- what materialized up to that court
22 decision. And how far back has the research gone as to, you
23 know, whether there was information that was overlooked or
24 ignored because of those chain of events?

25 Are -- you're not aware of it or the preparers weren't

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1 aware of it or --?

2 MR. ROUTHIER: Well I can't offer that with the analysis
3 in this current Supplemental document is all fresh. We went
4 back to our analysts and asked them to provide their best
5 scientific judgment and opinions so all the analysis is fresh.
6 It is a Supplement to the existing EIS so it doesn't, you know,
7 fix any problems that -- you know it doesn't alter the text for
8 the conclusions of the original. We have new analysis to try to
9 supplement and that's fresh analysis from our analysts.

10 MR. LOMAN: In the end it's going to be up to the Federal
11 judge that has this case, Judge Beistline, to decide whether or
12 not the Agency appropriately addressed the remand. We think
13 that we have. But, you know, I have to tell you Jack that if he
14 would have said, you know, for the most part but anything in his
15 answer it's our job as a super -- it's a primary job of a
16 supervisor in the Federal government or everywhere else, that
17 people have the tools and the ability to do their job -- that's
18 my job. And it's my job to foster dissent and try to nurture
19 dissent. And where it doesn't meet the Agency's goals or even
20 the political goals of people, it's my job to stand up and tell
21 political appointees or anybody else in the organization that
22 their aspirations can't be met. And tell people what they might
23 not want to hear. I'm not afraid to do that.

24 Our people -- yes sometimes they are but you know -- let
25 me just say this. When you have 40 pages -- 40 pages of

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1 excerpts from an Environmental Impact Statement that address
2 uncertainties -- lack of information et cetera, and practically
3 none of it has any context in the decision to be made, you have
4 to say to yourself why would an Agency do that? I'm not going
5 to go into that. But that's a fair question and I think that's
6 where you're going with this. And because I know you think
7 about these things really hard.

8 Was it a perfect Agency that produced the document? No.
9 And the Federal court -- the District Court in this case found
10 some deficiencies. We intend to address them to the
11 satisfaction of the court, and taking into concerns everything
12 we learn at these public meetings and the comments that we
13 receive.

14 MR. SCHAEFER: The only reason why I asked all these
15 questions was because, in our previous hearings we were told
16 that when you make your public comments you cannot ask any
17 questions. And so I figured I'd ask as many questions as I
18 could before we have this public hearing so that we can have a
19 little bit of an understanding as to what we're faced with and
20 what changes have taken place. And I apologize for, you know,
21 taking up so much of your time. With that knowledge that, you
22 know, that we can ask these questions when we make our comments
23 when we testify on this thing. I'm done. I'm ready to testify
24 but there's others that --.

25 MR. RONALD OVIOK: Thank you your honor. My name is

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1 Ronald Oviok, Senior. Thank you for your presentation and your
2 reports -- also from the people of Pt. Hope. And right now I'm
3 probably late for my traditional food gathering. That's
4 probably -- you'll probably be coming back sooner or later for
5 this -- reports. And to me, you know, I didn't know -- first
6 time I heard about this natural gas document report. Tell you,
7 it's about to be presented to the people and go forward and
8 please, notify you at Pt. Hope -- (indiscernible) already go on
9 further before people here present anything to the Department.
10 Thank you.

11 MR. LOMAN: Thank you very much sir.

12 MS. FRANKSON-HENRY: Aggie Frankson-Henry for the record.

13 MR. LOMAN: Thanks a lot.

14 MS. FRANKSON-HENRY: Last name F-R-A-N-K-S-O-N hyphen H-E-
15 N-R-Y. My question is, how can you clean all the oil on ice
16 scientifically, biologically? How can you clean all the oil on
17 ice? Do you have the expertise in this harsh environment?
18 That's my question.

19 My other question is, how can you make sure that trillions
20 of oil that may be leaked from a well be cleaned and managed in
21 a 40 to 90 mile hour gusting wind?

22 As we all know, us Inupiat people of the Arctic, we can't
23 even think of certain oceans because our life would be
24 endangered by the great seas. Those are my two questions in
25 life.

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1 Environmental Impact Statement that I was going to
2 comment, but since I didn't know we could ask questions I'm
3 asking it now. And before we go on to any testimonies, are you
4 all done with your report to the community members here in Point
5 Hope before we go into a public hearing to inform, educate?

6 MR. LOMAN: We've presented all the information that we
7 came to present. We want to continue to ask questions and you
8 can ask questions while you're giving your testimony. I'll try
9 to answer them. What I try to avoid doing is getting into
10 debates with people, because I didn't come here to debate
11 anybody. I came here to listen.

12 Those questions that you asked are on the record, It's
13 now the Agency's obligation, under the National Environmental
14 Policy Act, to answer them. Answer them in writing and
15 memorialize that answer in a final Environmental Impact
16 Statement. I sort of answered your first question early on.

17 Can you clean up, effectively clean up a 100 percent of
18 oil on ice? I have not seen a 100 percent of oil in a major oil
19 spill be cleaned up in anywhere by anybody, anytime. So it's
20 safe to say that they will not clean up with all the technology
21 that's available today 100 percent of any oil in a major oil
22 spill that takes place on ice.

23 If you spill a gallon of oil on ice you can clean a 100
24 percent of it. In 90 knot winds you will not be able to clean a
25 100 percent of it because it will blow through the air all over

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1 the place.

2 First time I came to Point Hope by airplane, I got off the
3 plane, I was wearing a ball cap. There were 45 knot winds which
4 is half of 90 knots and I swear to God my ball cap went to
5 Russia. It disappeared. And so it's safe to say that spilled
6 oil on the surface, in those kinds of winds, it's going to be
7 far from a 100 percent. Typically, and our documents reflect
8 it, the industry's able to clean up about 12 percent.

9 MS. FRANKSON-HENRY: That's all?

10 MR. LOMAN: About 12 percent. Much of the oil in typical
11 situations evaporates.

12 MS. FRANKSON-HENRY: So our -- all our migratory marine
13 mammals and birds will be affected by this development if it
14 occurs?

15 MR. LOMAN: In the event of a major oil spill?

16 MS. FRANKSON-HENRY: Will you be able to help them and get
17 another ocean for them?

18 MR. LOMAN: You certainly can't make an ocean -- not any
19 man that I know of or any industry. In the event of a major oil
20 spill in the Arctic under the activities that have been proposed
21 and are being proposed now, exploratory drilling. What industry
22 has put before the Agency for approval is a spill response
23 capability that is -- it's really almost to the point where if
24 you add more vessels or more capability, you could have a
25 negative impact from that magnitude of -- it takes boats and

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1 people et cetera, in an area that's sensitive. I mean, we all
2 agree that the Arctic is a sensitive environment.

3 So you add more and that has more effects -- negative
4 effects on the sensitive resources. And it's now to the point
5 where it doesn't make any sense. One, given the chance of a
6 major oil spill is very, very negligible. It's not likely to
7 happen in the first place. Even in the Arctic conditions there
8 have been 83-84 exploratory wells drilled -- 30 in the Beaufort,
9 five in the Chukchi. There have been no major oil spills.
10 That's not a lot. Eighty-three in Alaska, most in the first
11 half of the Federal government's oversight for 17, 18 years.
12 Only three in the last half of our Agency's existence.

13 So, when we look at what industry says they intend to do
14 with respect to spill response we know this. It's not like Deep
15 water because the Deepwater Horizon incident, because it's about
16 150 feet. So in the event of that catastrophic release at the
17 ocean floor, that oil will arrive to the surface in seconds not
18 days in a place that's unknown like the Deepwater Horizon spill
19 occurred.

20 It arrives to the surface in seconds and in minutes
21 because their spill response capability is right there, right
22 there in place. That was not the case with the Deepwater
23 Horizon. Did they mobilize a lot right away? Yeah -- matter of
24 fact I'll reserve my opinion of what went on. But what's being
25 proposed now, it's at substantial capability and it's right

1 there. Will they clean up a 100 percent? Probably not. Will
2 they keep it from harming marine mammals? We hope so -- might
3 not.

4 Can you bring claims under the laws that exist today for
5 damages to natural resources? Definitely. What does that tell
6 industry? That tells industry -- industry is motivated by
7 money. There's no industry that's going to come up here and do
8 anything unless they think they can make money, period. They're
9 motivated by money. If they have a major oil spill it will be a
10 negative -- negative in a big way in the Arctic. So that's a
11 big motivator without any regulatory agency to keep them from
12 having a major oil spill.

13 That being said, I think we'll let us respond to you in
14 writing in the FEIS with respect to your questions. I know that
15 we can't satisfy anyone who's concerned about even the remotest
16 chance of hurting something that is so important to your culture
17 and to your children et cetera. And I understand that
18 completely.

19 MS. FRANKSON-HENRY: One more question. Aggie Frankson-
20 Henry, for the record, F-R-A-N-K-S-O-N hyphen H-E-N-R-Y. We
21 know that ice pressure ridges build up, our ice builds up. And
22 a wall -- the ice can be as tall as this building, once it goes
23 up because of the currents in our waters, in our oceans. We
24 know that will be very discouraging to industries to know that
25 their rig can just go in seconds. It can happen. And if

1 they're not careful it will happen because of our climate.

2 I believe climate change is not going to melt all the ice.
3 You never know -- it may be even just -- even get harder and
4 more frozen and compact, the Lord willing. I know for sure in
5 the Arctic, in the Beaufort Sea and straight down here in the
6 Chukchi Sea, our ice comes from afar. And it's a challenge. We
7 know we cannot go on the ice. We would no longer be alive if we
8 didn't know. If we didn't have no means of transportation, your
9 Coast Guard officials will be endangered if they were to try to
10 rescue the personnel working in the rigs, on the ships. Not
11 every ice breaker works.

12 With all the contaminants along with the vessels, with the
13 Clean Air Act regulate them -- enforce them. Put those -- get
14 those tax monies from them -- from those vessels to -- not only
15 from the amount of oil gushing out from a well. You have to see
16 these other impacts too that will affect our air and our water
17 and our land, our people.

18 We've been -- for so many years giving testimonies
19 regarding how affected we are not only from oil and gas but also
20 from Project Chariot, Cape Lisburne site. We don't know what
21 kind of chemicals they have, what they put into our lands, in
22 our air, and our sea.

23 We're affected -- the whole coastal communities along the
24 coast. We take it serious when we don't land a whale. Maybe
25 it's because of the seismic testing. Maybe that set the bowhead

1 whale from seismic testing has gotten them, you know, uneasy.
2 And the effects of seismic testing, too, needs to be informed to
3 the public of how our marine mammals and our people will be
4 affected. Once it bounces on the rocks to a person, to a
5 mammal, to a bird, to fish. Their ears are blown off. The
6 walruses, the seals, the stomachs of the bowhead whales and all
7 the other marine mammal species I care about, and love to eat.
8 Because if they're affected, I'm affected. Our eco-system even
9 through seismic testing, we did not have the voice to say no to
10 seismic testing other than coming here in these government to
11 government consultation meetings and then ask (indiscernible).
12 Thank you.

13 MR. LOMAN: Thank you.

14 MR. SCHAEFER: Can we testify now?

15 MR. LOMAN: You certainly can Jack.

16 MR. SCHAEFER: I'm not used to doing this right away but I
17 guess I can. Can you hear me okay? My name is Jack Schaefer.
18 I am the Council Member with a federally recognized Tribe known
19 as the Inupiat Community of the Arctic Slope. It is a Regional
20 Tribe for all the villages in the North Slope. It has the same
21 responsibility as any Federally recognized Tribe. And we have
22 expressed our concerns for quite some time. I am the grandson
23 of Timmy Kanooguk (ph). He caught 23 whales within his
24 lifetime. His last one was caught by his son in 1975 just
25 before they had this whale ban. So, you know, I grew up around

1 culture.
2 Concerns that I have in regards to these public hearings.
3 We have very little opportunity to express our concerns
4 regarding our government to government relationship and
5 obligations. And so, with that said, there's this government
6 report GAO Report 02357 which is a report that dealt with the
7 restoration of Prudhoe Bay. There were promises that were made
8 by the industry that they'll clean up Prudhoe Bay when they're
9 done. We expressed our concerns in the past in regards to the
10 migratory animals that are directly affected by development.
11 And the migration had been changed because of development that
12 had taken place in Prudhoe Bay, that from the view of a
13 satellite, looks like East L.A.
14 There's so many lights in Prudhoe Bay and the animals have
15 moved away from there. Now they promised that they would
16 restore this area. GAO did a report indicating that it wasn't
17 done and that companies had changed their name, walked away,
18 filed for bankruptcy, and still has not been cleaned up and the
19 impact is still there.
20 And the caribou are moving. The animals are moving
21 elsewhere. And development is moving closer and closer to Point
22 Hope, moving west, without that restoration. And we feel that
23 that restoration needs to take place so that these animals have
24 a place to go. We feel that development should take place on
25 land before you even go to the ocean.

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1 And it's interesting to see the changes in regards to --
2 what has been said in the past in dealing with the presence of
3 oil, evidence of oil, and circumstances. When there has been
4 offerings of incentives to do business and do development for
5 less -- industry goes that way. And so it seems and looks like
6 the temptation has been brought offshore and not onshore.
7 And that really has a direct impact in regards to benefits
8 of those stakeholders, when there's taxation that can take place
9 on land. When there are businesses such as ANSCA Corporations,
10 Land owners, municipalities, Tribal governments' ability to tax
11 onshore can be taken advantage of, can as an arrangement of
12 doing business. That looks like a very slim thing that's going
13 to happen now.
14 The Federal government has indicated through talking --
15 that two individuals that had to fight for land on the Trust,
16 known as a Native Allotments under 1906-1926, that their
17 allotments are very valuable in oil and gas. And that you need
18 to prove that they're not valuable in oil and gas and subject
19 to, you know, certain processes. Now that the push has gone for
20 offshore, those opportunities and those events will not -- and
21 shows that they will not take place.
22 The people that have Native Allotments, the businesses
23 that own property onshore will lose. Oil formations are, you
24 know, look like saucers filled with liquid, you know, those
25 round plates. And so when you go to the middle and use a straw

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1 and you suck on it -- you know you get everything in that
2 saucer. But the edge of that saucer is right at Wainwright,
3 Point Hope, Point Lay, Barrow, Katovik. And there aren't
4 taxation by the State and others. So they go where there's
5 cheaper and that's what they were interpreting.
6 When we confront and indicate that is a concern that we
7 have they say, oh there's nothing. There's just little puddles
8 over here and we got no interest. Where's this government
9 documentation that indicates, you know, this? So we see this
10 development taking place offshore and, you know, we miss out as
11 a major stakeholder. And so onshore is something that should be
12 looked at and utilized to the maximum extent. And in the
13 meantime, you know, try to determine what type of infrastructure
14 that you will use to transport that oil.
15 We had said no to Alaska Native Claims Settlement Act. We
16 received only ten percent of the land that we have used, that we
17 own. We have not addressed the ownership of the ocean. We feel
18 we own the ocean. That is ours. The definition of Alaska we
19 feel it still needs to be interpreted and defined. Whether it
20 be something done by the Russian government, something done by
21 the Department of Defense through Public Landowner 92 or the
22 three mile Alaska boundary.
23 And so we've gone to court, saying the ocean is ours.
24 That belongs to us. You've got to deal with us. And there are
25 rulings that have been made over years, since the late 70s, have

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1 been -- we don't have to address this. We don't have to give
2 you a decision now. We'll wait and decide on this from a
3 different case that has been addressed to us and brought to our
4 attention. And so that's been going on for years now.
5 So we feel we still have ownership of the ocean and still
6 have that claim and have the authority to regulate, the
7 authority to tax. And that hasn't taken place now. So this
8 human right is being violated as we speak, and we need to have
9 this addressed. As I had indicated earlier during our
10 discussions that we have dealt with the United Nation sector on
11 our Human Rights regarding Prudhoe Bay, the environmental
12 impacts, the economic impacts that have taken place. What was
13 taken from our oil away from us, the monetary value, being taxed
14 in regards to the reduction in animals. So that's one of the
15 things that we are, you know, about to address and are concerned
16 about.
17 The impacts from previous spills like the Exxon Valdez
18 still had -- really had a severe impact on the red fallrou (ph)
19 which is what we refer to as a south rook (ph), a little bird
20 that is about a little longer than this, that is red. It's a
21 sandpiper type of bird that when it swims in the water it goes
22 in circles. That used to be a bird that was -- that had one to
23 several hundred feet thick and 52 hundred feet in height running
24 miles along the beach, and the form of waves when they'd fly.
25 After that Exxon Valdez spill we never saw that again.

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1 There's very few of those birds around. And that used to be
2 something that we had to get for our grandmothers because it was
3 tender meat and they enjoyed that very much. So we took great
4 pride as little kids to gather those birds for our elders to
5 eat. And so there has been some impacts in regards to animals
6 that have taken place on these disasters in the past and we feel
7 that there hasn't been enough studies for the Chukchi Sea, the
8 Beaufort Sea. As to who exactly did all these technical reports
9 for the Beaufort Sea and the Chukchi Sea is still unclear and
10 as to whether they're reliable or not.

11 The ones that I noticed in regards to the Beaufort Sea
12 were done by an accounting company, KPMG, through a contract.
13 And so as to whether or not that information is accurate or not
14 is unclear. Furthermore, they're old and that has already been
15 admitted to the Environmental Impact Statements. Baselines
16 haven't been established.

17 There's no way that you can clean up an oil spill in ice.
18 The impacts are far too great. There are no revenue sharing
19 arrangements. There's no corporate social responsibility. We
20 have no control. Decisions are being made by the North Slope
21 Borough, by the State of Alaska, regardless of their
22 relationship between Federally recognized Tribes and Federal
23 agencies regarding the Coastal Zone Management Program and other
24 programs.

25 So all of this is very much premature. I don't know why

1 we're going beyond the basic concerns about cleaning up an oil
2 spill in the middle of winter and bad ice conditions. For ice
3 scourging is something that has been looked at thoroughly in the
4 80s where the ice rubs against the ocean floor and the patterns
5 shown what effects it has on wildlife refuges and those animals
6 that are protected within those, whether it be the muir (ph) or
7 something else.

8 The areas that has some concerns in regards to the whaling
9 ships that have sank off of the southern part of this lease sale
10 area. The water is very shallow. And when you look at flows of
11 anything, when something is wide, the flow is slow. When
12 something is sharp it's just like an -- shallow is just like an
13 hour glass. So everything moves real quick. And different
14 times of the year just by the, you know, the physics -- the
15 physical risks you know -- 100 feet times 75 feet versus one
16 mile deep. The patterns and the flows of that oil will hit --
17 portend and we might not see the real impacts, but our relatives
18 will, from Wainwright and the villages all the way to Canada
19 where it's shallow and then where it mixes into deeper water.
20 What agreements have been made and were they done with our
21 consent?

22 Are we going to welcome those whaling crews that will lose
23 their ability to whale when there's a spill and come over here
24 and compete with us through this term, good neighbor policies
25 that have been established since 2000, which has not been told

1 to anybody. Very little is known about it and what was done
2 with it and what the status is and whether something is still
3 there.

4 We would like to have existing EIS's and other reports
5 incorporated into this EIS such as for seismic. The
6 Environmental Assessments and the findings and no significant
7 impacts in regards to authorizations for taking of animals for
8 seismic purposes through the National Marine Fishery Service and
9 the U.S. Fish and Wildlife Service which has a different set of
10 regulations that have these methodical, categorical exclusions
11 involved where they don't involve legitimate addressing remedies
12 and correcting those findings that have been made in the form of
13 an Impact Statement.

14 And we have gone to court with that in the past and lost
15 several times because of those loopholes and the interpretations
16 that have been put into Federal Register that took away from
17 Federally recognized Tribes and renamed non-governing
18 organizations and municipalities as communities that has a
19 identical figure as Federally recognized Tribe and the
20 exploitation of those regulations that have gone and been
21 utilized up to this date.

22 As time went on, these adjustments have been made. We
23 haven't been consulted with that and haven't gone beyond a
24 consultation phase. And we do understand that we are having
25 this Trust relationship that we are trying to end and work with

1 each other and trying to move in a right path to ensure that we
2 benefit both ways in the future. And the technology doesn't
3 show that we have that there and taking those big risks offshore
4 at this time to the methods that are being proposed in the
5 Environmental Impact Statements that have been drawn up already.

6 And so, again, I do, encourage you -- you look offshore --
7 I mean onshore first -- look offshore when you have the
8 technology. But, as far as I can tell, that technology isn't
9 there. The response isn't there whether you can cap a well,
10 before it freezes too much is unclear. And to be going at it
11 again the following year when it melts off and there's open
12 water.

13 It's still too soon. And there are other arrangements
14 that can be made. And I feel that you need to honor and
15 implement your Federal regulations in regards to looking at
16 environmental concerns. Also the international flaws like the
17 Law of the Sea and whatever else is applicable. Again, with
18 migrating animals and such and I find it really surprising that
19 the Chukchi is being looked at when there are other locations
20 that could be taken advantage of, whether it be the Kotzebue
21 Sound or whatever.

22 So I am really, you know, confused as to the location
23 other than what we've been told that, you know, it's the largest
24 oil deposit in the world. And because of your responsibility as
25 the Federal government toward us indigenous peoples, starting

1 from the time the (indiscernible) filed lawsuits from the time
2 that Jacob Adamson filed his lawsuit back in 1977 in regards to
3 the banning of harvesting bowhead whales and to the decision
4 that was made, which was somewhat controversial because of the
5 decision was said that, because the International Weather
6 Commission is going to make a decision next year, we feel that
7 we will not take a position that there's a significant impact in
8 regards to oil and gas. And therefore, we'll dismiss this case
9 with the understanding that you'll be able to whale next year.

10 So, you know, all of these decisions that have been made
11 are really controversial. We are not the only village -- we're
12 not the only Tribe to have filed in the court in regards to the
13 ocean. ICAS Native Village of Gambell, Nome Eskimo Community,
14 Native Village of Akutan, Native Village of Eak (ph) have all
15 filed lawsuits and claim ownership to the ocean, in regards to
16 their subsistence activities and their way of life and the term
17 that they had used which was imminent threat and the Federal
18 government's interpretation in dealing with imminent threat
19 doesn't apply until you turn that stone on the ocean floor
20 versus what Bush Administration saw, term on how we use that
21 phrase.

22 So there are these things that we need to have addressed
23 and we need to be at the table. I am unaware of any
24 participation in dealing with the Endangered Species Act. Bruce
25 Babbitt had given an example on how the Endangered Species Act

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1 worked where everybody comes to the table, draw the lines, where
2 development is going to take place. Where subsistence is going
3 to take place, where the animals are going to take place, how
4 it's going to impact and come out with a conclusion and a
5 process and after that's done, it's hard to come back to the
6 table. That was Bruce Babbitt's explanation of the Endangered
7 Species Act and how that process works. I am unaware of that
8 taking place, haven't heard of it taking place here in Point
9 Hope. I haven't heard of it taking place with the Inupiat
10 Community Arctic Slope. I feel that there has been things that
11 might have been done without our knowledge regarding the State
12 of Alaska and we need other non-governing organizations that
13 poses to have authority over us as Federally recognized Tribes.

14 And so we have Human Right issues. We are concerned about
15 our future. And you know it all falls back on, you know, can
16 you clean it up, it be capped and we shouldn't even bother with
17 it. We have wasted a lot of time talking about small portions
18 of the Environmental Impact Statement, different types of
19 animals, different types of things when we know that we can't
20 clean this up. That it can't be done safely. And we haven't
21 seen the regulations that have been announced and the
22 reassurances that have been given by the Department of Interior
23 indicating that these regulations have been changed. We haven't
24 seen that. So we haven't been able to give an opinion as to,
25 you know, what has changed if anything at all. And we really

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1 can't afford to starve and that's what we have at risk.

2 The people in Cook Inlet, their herring has never
3 recovered. The subsistence hasn't really recovered. They have
4 had a real hard time. They've never been compensated for over
5 20 years adequately. We don't want that to happen to us.
6 There's too much of a risk. Exhaust what you have onshore
7 before you go offshore.

8 Re-look at how you're doing this and put these guys back
9 in their places because Edwards versus Morton, which was a case
10 that involved the trust relationship of the United States and us
11 regarding the impacts and the exploitation by transnational
12 corporations such as British Petroleum or Atlantic Richfield.
13 And the responsibility of the United States to protect us and
14 our interests have already been decided on through that case.
15 And we feel that still needs to be addressed. As far as I know
16 our legal representation has not addressed our trust
17 relationship in regards to indigenous peoples. The First People
18 versus the trust relationship with the general public. And
19 those are two different animals all together, still not real
20 clear understanding in regards to that but it has been asked on
21 Congressional record in regards to EPA and NOAA in their trust
22 relationship only toward the general public, not to our
23 Federally recognized Tribes.

24 Our legal representation, to our knowledge, has not
25 addressed this trust relationship yet. And I don't know when we

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1 will, if we will. But we are working on a trust relationship
2 and we need to continue to do that. We do not like court cases.
3 We don't like going to court. It takes a lot of our energy and
4 a lot of our time. I could be watching my favorite TV show now.
5 And -- but no, we're talking about this and we don't have this
6 relationship. You know they have no -- companies haven't even
7 partnered with us fully. We don't have a royalty management
8 system in place. We haven't established our environmental
9 regulations. We feel the regulations that are being done by the
10 State under its Coastal Zone Management program and their own
11 regulations have a conflict of interest. And the State is not
12 fulfilling its obligation. And they won't, because they have
13 this constitutional thing that deals with equality. And they
14 don't respect the sovereignty of tribes and culture.

15 So I have more to say but I can't think of anything right
16 away. Again you know we didn't have much time to completely
17 review. It's hard to imagine who is delegated to gather the
18 birds, to gather the mammals, to get the walrus and clean it and
19 let it go. That portion of the Environmental Impact Statement
20 is very confusing. Some of it is semi-blank. They have certain
21 delegation. There's only two organizations that can deal with
22 birds, rescue the birds. I can't go out there and rescue a bird
23 if there's a seal. The same goes for mammals. There are
24 delegated groups assigned to do that. They don't have the
25 technology to deal with a 2,000 pound walrus which happens to

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1 have 30 other friends with him and they're all real tight, just
2 like a gang, a family. And they're very aggressive when you
3 insult one of them. So there are, you know, concerns that we
4 have. And I hope we continue to move forward and try to come
5 out with a way that will work. But at this time it doesn't look
6 that way.

7 And I hope that all these other reports are incorporated
8 into and these concerns that are incorporated into this and that
9 they are responded. The Environmental Assessments that have
10 been made regarding seismic completely ignored Tribal concerns.
11 They only addressed and responded to non-governing organizations
12 such as the Alaska Wilderness League, The Center of
13 Biodiversity, the Natural Resource Defense Council. Those big
14 groups are the only ones that have been responded to by, you
15 know, governmental entities in these Environmental Impact
16 Statements. And Tribes need to be addressed too.

17 The North Slope Borough isn't the only authority to be
18 responded to. They have interests and they have conflicts of
19 interest also. And when the government tells them to do
20 something, they have to do it. And we had some very interesting
21 Governors in the past. They're not very trustworthy. And they
22 don't look out for our interests. They look out for Alaska as a
23 whole. And regardless of the impacts, and we seen that. Red
24 Dog has been the number one polluter in the United States for
25 six years straight. And it's going to take 40 years to clean up

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1 that mine and ten years of follow-up. And there's a lot of
2 money involved with that. And they're expanding on that thing.

3 With that I thank you for allowing me to testify and
4 please keep this file open for additional comments and I really
5 look forward to mending our trust and our responsibilities. We
6 don't like to be adversaries in the world of -- world wrestling
7 and two cave men. And I want to be your wrestler. Thank you.

8 MR. LOMAN: Thank you very much sir -- appreciate it.

9 MS. FRANKSON-HENRY: Leaving? I agree with Mr. Schaefer.
10 This is Aggie Frankson-Henry, for the record. F-R-A-N-K-S-O-N
11 hyphen H-E-N-R-Y. I believe there should be an extension if
12 Environmental Impact Statements allow the coastal villages that
13 are impacted. As you know that -- there may be not very many
14 people that are educated with seismic testing in the Bassett
15 (ph) house -- to the people and the marine mammals. Is Albert
16 Barros still with --?

17 MR. LOMAN: Albert retired. He went back to the Nesperth
18 (ph) Reservation.

19 MS. FRANKSON-HENRY: Is there another person that has his
20 spot?

21 MR. LOMAN: Yes -- Michael Haller -- right there.

22 MS. FRANKSON-HENRY: Okay. For the record my
23 Environmental Impact Statement is dated November 2, 2010.
24 Bureau of Ocean Energy Management Regulation and Enforcement. I
25 had attentioned it to Albert Barros, Bureau of Ocean Energy

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1 Management Regulation and Enforcement Community Liaison, cc
2 Jeffery Loman, Deputy Director of Bureau Ocean Energy Management
3 Regulation and Enforcement. Is that your current title?

4 MR. LOMAN: Yes ma'am.

5 MS. FRANKSON-HENRY: This is regarding opposing the Arctic
6 Multi-Sale in the Beaufort Sea and Chukchi Sea planning areas
7 oil and gas lease sale 193, 209, 212, 217 and 221. For the
8 record, I'm Aggie Frankson-Henry, a Tribal Secretary and Tribal
9 member of the Native Village of Point Hope.

10 I am opposing the Bureau of Ocean Energy Management
11 Regulation and Enforcement decision on the proposed action for a
12 multiple sale EIS for the Chukchi Sea Sales 193, 212 and 221 and
13 Beaufort Sea's lease sale 209 and 217. And I support
14 Alternative One, Beaufort and Chukchi Sea, no lease sale.

15 I am an Inupiat mother, wife, daughter, aunt, Tribal
16 member of the Native Village of Point Hope, and most of all a
17 whaler and harvester dependent on the Chukchi Sea and Beaufort
18 Sea for means of survival.

19 Being Inupiat is an inherit freedom to hunt, harvest from
20 the vast frozen seas to nurture my family and extended families
21 across Alaska and Lower 48. The Chukchi and Beaufort Seas
22 provides nutritional food supply on my table without any after
23 taste of spilled debris from oil and gas. As stewards of the
24 ocean, I believe there is not enough traditional knowledge and
25 scientific studies to support the lease sales. With that said

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1 please, no lease sales.

2 Tikigaqs, Point Hope, Alaska, oceans is a land of
3 opportunity to preserve my culture. Because of climate change,
4 this generation is faced with for a healthier ecosystem balance
5 for bowhead whales, walruses, polar bears, seals, ducks, fishes,
6 birds, crabs, plankton, oysters, clams, seaweed, worms, killer
7 whales, nor-whales, right whales, beluga whales, grey whales and
8 all the marine mammals of these two great oceans the Chukchi and
9 Beaufort that we the people of Point Hope are blessed with.

10 The Bureau of Ocean Energy Management Regulation and
11 Enforcement must conduct scientific studies before a lease sale
12 must be proposed for a lease sale. My question is, how can you
13 clean all the oil on ice? How can you make sure that trillions
14 of oil that may be leaked from a well be cleaned and managed in
15 a 40 to 90 mile hour gusting wind? As we all know, as Inupiat
16 people of the Arctic we cannot even think of surfing the oceans
17 because our lives would be endangered by the great seas. Based
18 on current agriculture in Valdez, Alaska, it is not my best
19 interest to harm this great State with offshore oil, gas
20 drilling around the Chukchi and Beaufort Seas.

21 And based on the facts of the current agriculture in the
22 Gulf of Mexico, the impacts and damages brought forth into the
23 United States of America from the Gulf of Mexico and Valdez oil
24 spills, it is not my interest to harm these oceans that this
25 great nation is dependent on. The natural resources that are

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1 impacted by proposed spilled debris from oil, gas and toxic
2 chemicals in which is an imminent threat to our ecosystem and
3 marine life, as well as the people of this great State of Alaska
4 who are dependent on the two great pristine oceans, the Chukchi
5 and Beaufort Seas. I oppose the industrial development along
6 the Chukchi and Beaufort Seas.

7 I am voicing my right to life, liberty and equality. I
8 believe this great State, the Federal government agencies and
9 industrial servants can find other means of resources to benefit
10 the economy like wind and water generation to fuel the economy.

11 I am an Inupiat and I love to eat my traditional meals
12 that are delicious, healthy and nutritious in which are provided
13 naturally by the great seas along the Chukchi and Beaufort Seas.

14 I am an American who strives to survive in this harsh climate
15 through traditional knowledge and very dependent on the
16 resources along the seas. I oppose the industrial development
17 along the Chukchi and Beaufort Seas.

18 Once again I am opposing the Bureau of Ocean Energy
19 Management Regulation and Enforcement's decision on the proposed
20 actions for a multiple sale EIS for the Chukchi Sea Sales 193,
21 212 and 221 and Beaufort Sea Sales 209 and 217. And I support
22 Alternative One, Beaufort and Chukchi Sea, no lease sale. Thank
23 you for your time.

24 MR. LOMAN: Thank you very much. Anybody else that hasn't
25 testified like to make a comment before we close? I would like

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1 to thank everybody for coming. We appreciate your time. We
2 know that there are other events and activities in the community
3 tonight. We apologize for having to hold this meeting during
4 those activities and we appreciate the time you sacrificed and
5 the comments you've made. And we hope that you've learned and
6 we've shared some information that was helpful to you. Thank
7 you very much. This hearing is closed.

8 THE REPORTER: Off the record at 9:40 p.m.
9 (Off record at 9:40 p.m.)
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TRANSCRIBER'S CERTIFICATE

1
2 I, Judy Bradshaw, hereby certify that the foregoing pages
3 numbered 2 through 73 are a true, accurate and complete
4 transcript of the Bureau of Ocean Energy Management Regulation
5 and Enforcement Public Hearing regarding the Environmental
6 Impact Supplemental Statement Relating to Chukchi Sea Sale 193
7 held in Point Hope, Alaska on November 2, 2010, transcribed by
8 me from a copy of the electronic sound recording to the best of
9 my knowledge and ability.

10 Dec. 8, 2010 
11 Date Judy Bradshaw
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Bureau of Ocean Management Regulation and Enforcement

Public Hearing

Environmental Impact Supplemental Statement

Relating to Chukchi Sea Sale 193

November 3, 2010

Point Lay Community Center

Point Lay, Alaska

VOICE CHECKED/CORRECTED

BOEM TEAM MEMBERS:

Jeffery Loman, Deputy Regional Director

Michael Haller, Community Liaison

Michael Routhier, NEPA Coordinator

Bob Peterson, Senior Geologist

John Callahan, Public Affairs Officer

Mary Cody, Wildlife Biologist

Sharon Warren, Program Analysis Officer

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PROCEEDINGS

(On record at 7:35 p.m.)

MR. LOMAN: Good evening everybody and thank you very much for taking time out of your lives to attend this meeting.

The purpose of this meeting -- my name is Jeffery Loman -- I am the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, formerly called MMS. Our Agency is going through a major reorganization. The reason that we're here tonight is to comply with a Court Order from the Alaska District Court that involves our environmental compliance with respect to the National Environmental Policy Act.

The National Environmental Policy Act is a law that was signed by President Nixon and it does several things. It is designed to be open and involve the public when a Federal Agency intends to take a major Federal action. A major Federal action could be building a bridge, building a road, relicensing a hydropower project, building a large facility of any kind. And the Federal government is funding or it involves a lease that the Federal government has to approve.

In this case, the major Federal action was a oil and gas lease sale in the Chukchi Sea. That sale took place after the Agency had completed an Environmental Impact Statement in February of 2008. And the government issued, after that lease sale, 465 leases for a total of about \$2.6 billion. Shell Oil was the largest winner of bids and is now the largest lease

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holder with about a \$2.1 billion investment in leases in the Chukchi Sea.

Our approval of that lease sale was challenged, in part, on the grounds that we did not comply with the National Environmental Policy Act, and the case went before the Alaska District Court Judge Beistline. And the judge ruled in July of this year that the Agency had done an adequate job of most of the aspects, but did not appropriately analyze natural gas development. And there are incentives for national (sic) gas associated with these leases.

And the Agency needed to do what -- an analysis under section 1502.22 of the NEPA regulations, on about 40 pages of excerpts from the original -- original final EIS that talk about uncertainty, missing information to (indiscernible) gas, things of this nature.

That was put before the court in Plaintiff's Exhibit 129. And it has things -- for example, like there is -- it makes a statement. There is uncertainty associated with the population structure of the bowhead whale. And, in this case, because this written between 2004 and 2007 sometime, the International Whaling Scientific Committee was still debating whether or not there were multiple stocks like the Bering stock and the Beaufort stock or other stocks of bowhead whales. Since that time, the Scientific Committee for the IWC has concluded that there is one stock.

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1 So this 1502.22 analysis is kind of using a little bit of
2 logic here. What's the context of the uncertainty, assuming it
3 still existed? Does it have any implication to Inupiat hunters,
4 Inupiat whalers? We don't think so. Inupiat whalers have been
5 conducting those activities for a long, long, long time. And we
6 know of no reason why the Inupiat hunter would be concerned
7 about whether or not they were hunting a bowhead whale that was
8 a member of the Bering stock or a Beaufort stock if multiple
9 stocks existed.

10 Now the Scientific Committee has concluded there's one
11 stock. But more importantly is what's the context of it with
12 respect to making decisions about offshore oil and gas leasing,
13 exploration, seismic exploration, exploratory drilling and
14 things of that nature? We think there is no context there. It
15 wouldn't make any difference anyway.

16 But those kinds of statements existed in that document and
17 the court, we think correctly, said, you should explain whether
18 or not that information is necessary and has implications to a
19 decision on offshore oil and gas activities -- whether or not
20 it's obtainable, easily obtainable, and whether or not the costs
21 of obtaining it is exorbitant.

22 And -- so, how do we do that? Well we do that by doing
23 more NEPA. And these NEPA lawsuits involve -- if an Agency
24 loses you either, do NEPA where you didn't do NEPA, do more NEPA
25 or do NEPA right where you didn't do it right the first place.

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1 That's how the plaintiffs win in a NEPA lawsuit.

2 In this particular case, the court remanded us to conduct
3 these activities. And we're doing it by preparing -- starting
4 by preparing a draft Supplemental Environmental Impact Statement
5 which we have prepared and released and sent to various
6 stakeholders, individuals and organizations in the communities
7 throughout the Arctic in Alaska. And we have copies of that
8 document with us tonight, if you desire to take a copy and read
9 it. We're going to explain a little bit about it here in a
10 minute.

11 But before I go any further, just wanted to have the folks
12 that are with me introduce themselves starting with Mike and
13 then we'll go a little bit into the court remand, explain the
14 document and then take your testimony. Go ahead.

15 MR. ROUTHIER: Sure, hi -- my name is Mike Routhier and
16 I'm fairly new at the Agency, but I worked on these NEPA issues
17 so that means I basically help write the documents.

18 MR. PETERSON: My name is Bob Peterson. I'm Chief of
19 Resource Economic Analysis Section. I'm a Geologist. Most of
20 the people in my Section are geologists, geophysicists and
21 engineers. And we provide a lot of the information that -- Mike
22 would then build on for the impacts of the statement.

23 MR. LOMAN: And we'll go on with a little more detail on
24 that.

25 MR. PETERSON: Sure.

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1 MR. HALLER: I'm Mike Haller and I'm the Community
2 Liaison. I'm new to the Agency, but not to Alaska.

3 MS. WARREN: I'm Sharon Warren, Program Analysis Officer
4 for the Bureau in Anchorage.

5 MS. CODY: Mary Cody -- I'm a Wildlife Biologist for the
6 Agency.

7 MR. CALLAHAN: My name's John Callahan and I'm the Public
8 Affairs Officer for the Alaska Region. And I'd like to take a
9 few photos tonight. Is that all right with everyone?

10 MR. LOMAN: We were watching Predator while we were eating
11 dinner at the Cully Cafe. So I want to flex my muscles if I
12 can. Let's -- and it's for Judy who is our Reporter -- we'd
13 like to have you introduce yourself and at least last night it
14 worked pretty good. One shot at introducing your name and the
15 spelling of your name. She may ask you again if you testify and
16 have questions, as well. Starting with you ma'am.

17 MS. ANNISKETT: My name is Lily Anniskett.

18 REPORTER: Could you speak up, please?

19 MS. ANNISKETT: My name is Lily Anniskett. If you want me
20 to speak up, I've got something on my lip. I've got a pus. My
21 name is Lily Anniskett from Point Lay, lifelong resident. I
22 went to boarding school and I love it at Point Lay and I'm going
23 to protect my land.

24 REPORTER: Okay, can you spell your last name for me?

25 MS. ANNISKETT: A-N-N-I-S-K-E-T -- my husband was from

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1 Metlakatla. Yes, that's the way it's --.

2 MR. LOMAN: Thank you.

3 MR. FERREIRA III: I'm Leo Ferreira the Third. I'm Native
4 Village Point Lay (indiscernible) President.

5 REPORTER: Would you spell your last name?

6 MR. FERREIRA III: F-E-R-R-E-I-R-A.

7 MR. LOMAN: Sir?

8 MR. TRACEY SR.: Bill Tracey Senior, T-R-A-C-E-Y. So now
9 you know there's no relation to Dick.

10 MR. LOMAN: Or John?

11 MR. TRACEY SR.: Or John. Thirty-eight year resident.

12 Presently Fire Chief, (indiscernible) Pusher, and a very
13 interested resident about all these offshore leases going on.

14 MR. LOMAN: Thank you. Sir.

15 MR. LISBOURNE: Robert Lisbourne, L-I-S-B-O-U-R-N-E.

16 Resident here at Point Lay -- (indiscernible). We do a lot of
17 hunting, whaling, fishing, subsistence hunter.

18 MR. PIKOK: Perry Pikok, P-I-K-O-K, (indiscernible)

19 fishing, longtime resident at Point Lay.

20 MR. HENRY: Jack Henry is my name.

21 REPORTER: I'm sorry, could you spell your last name?

22 MR. HENRY: H-E-N-R-Y.

23 REPORTER: Thank you.

24 MS. TRACEY: I'm Marie Tracey. I work on North Slope

25 Borough Village, Communications Liaison for our Mayor's Office.

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1 I'm a Volunteer Fire Fighter in which I am a Captain. I'm a
2 Volunteer EMS Captain, 24-hour Volunteer, Ambulance Co-member.
3 I'm a Volunteer Coordinator under our Volunteer Search and
4 Rescue. I'm an NASTEC Director for our Native Village of Point
5 Lay. I was born here in the old village. Thank you for coming.
6 And I would like you guys to spell your names, too.

7 MR. REXFORD: Hello, my name is Julius Rexford. I moved
8 here back in '94, '93. Came here, on and off since 1983,
9 chasing the job. I'm the Alaska Eskimo Whaling Commissioner for
10 Point Lay. I (indiscernible) workers in Point Lay and I also
11 sit on the Alaska (indiscernible) Whale Committee, as a member.
12 I'm the Search and Rescue President and Public Works Supervisor
13 for the North Slope Borough.

14 REPORTER: Could you spell your last name, please?

15 MR. REXFORD: R-E-X-F-O-R-D.

16 REPORTER: Thank you.

17 MS. NEAKOK: My name is Lucy Neakok, N-E-A-K-O-K. I'm a
18 ASRC Village Resource Representative. And I'm also the Native
19 Village Appointment (ph) Secretary.

20 MR. LOMAN: Thank you. Sharon can you tell us a little
21 bit about the decision out of the Alaska District Court on this
22 lawsuit, so folks understand why we're here a little bit better,
23 than I can explain.

24 MS. WARREN: Okay. I put on the table the two Court
25 Orders that came out concerning the case. Again, the case was

1 filed of January, 2008, before the lease sale was to be held in
2 February of 2008. So the Judge, when the lawsuit was filed,
3 there wasn't, like, an injunction filed with it to stop the
4 sale. So the sale went ahead and was held in February of 2008.

5 And, so the lawsuit was still at the District Court and
6 over time it stayed there. And part of the reason why we have a
7 decision that you may think of, you know, it's February 2008,
8 sale happened and we get a decision out of the court in July of
9 2010.

10 Why, you know, why did it take that long? The reason why
11 it took that long is because there was another case concerning
12 Sale 193 in the D.C. Circuit Court over the Secretary's five
13 year program. So the Secretary when we -- before we have a
14 lease sale, it's within the five year program. The Sale 193 --
15 Chukchi Sea Sale, was in that five year program. And the
16 Department was sued by the environmental organizations
17 concerning having that sale, as well as other sales in that five
18 year program.

19 And there was -- the Chukchi Sea Sale was in there, plus
20 two more sales in the Beaufort and two more sales in the Chukchi
21 Sea. So the Secretary was told in that lawsuit that he had to
22 look at the environmental sensitivity when they're looking at --
23 the (indiscernible) Lands Act requires looking at environmental
24 sensitivity. And that wasn't done to the Court's satisfaction.

25 So this District Court case for the sale -- this Judge

1 didn't make any decision on that. And because, if the Secretary
2 decided once he looked at the five year program again, not to
3 have that sale in there, then the Court wouldn't have to decide
4 on this one, because it was in another Court. So it's very --
5 in several Courts I mean that's how decisions of the sale that
6 was.

7 So when the Secretary of the Interior came out with his --
8 affirming his five year program again in March 31st of this year
9 2010, he did a preliminary revised program. It kept Sale 193
10 still there in that five year program. But he took off, out of
11 that five year program, the two Beaufort Sea Sales and the two
12 Chukchi Sea Sales. So the only sale that would be in the Arctic
13 would be the one that had already happened. The Department was
14 not looking at any more sales during this five year period of
15 2007 to 2012.

16 So once that was made, then the District Court knew that
17 the Secretary was going to leave the sale as is. And so that's
18 why the District Court now decided to take on back the, you
19 know, look at the case and look what we did with the
20 Environmental Impact Statement. And so in July 21st the District
21 Court first issued the decision, an Order saying, as Jeffery
22 said, that, for the most part, we, the Bureau, had met its
23 obligations under NEPA. And the only places that we did not
24 meet those obligations was that we didn't consider the natural
25 gas. And we didn't consider the missing information and the

1 cost to obtain that missing information.

2 So the Court told us, and that's why this EIS is a -- you
3 notice it's a supplement. And it's small because it's focused
4 on just what the Court has remanded. Because all the other
5 issues that was raised by the governmental organizations, the
6 Native Village of Point Hope, Brett (ph) Oil, Inupiat Village --
7 Community of the Arctic Slope, were also litigants, plaintiffs
8 in the lawsuit. The Court looked at all those arguments that
9 were made there. It said, the Federal government, you know,
10 prevailed on those issues. But you need to go back, the Federal
11 government, and take care of these others.

12 So that's why the Supplement was done and that's why it's
13 just focused on those areas. The original EIS that it
14 supplements is still there. So all the information and Mike
15 will go into more on how the Supplemental EIS is done.

16 What's going to happen is that once we have the draft
17 Supplement, take public hearing, and take comments on it, then
18 there'll be a final Supplemental EIS. And that will be filed
19 with the District Court. Because the judge still has the case.
20 So that'll be filed with the District Court. And the District
21 Court, in September of 2010, also set out what the schedule of
22 when he wanted us to reasonably meet that -- his Order and he
23 has a court date of January 21, 2011, six months from the first
24 decision Order to say, you know, -- six months you should be
25 able to reasonably, you know, meet this -- fix these

1 environmental compliance issues.
2 And so once it gets filed with the District Judge, the
3 parties that sued the Federal government, is going to be able to
4 see the document also the documents behind it that went into
5 preparing that document. The attorneys, the legal
6 representation will be filing briefs back and forth and why it
7 needs it, why it doesn't need it. And then the District Judge
8 will say whether or not it meets it. And so, I mean it's a long
9 court process that we've been in. But the District Court Judge
10 will hear it on the points filed.

11 MR. LOMAN: Any questions about the court case in this
12 litigation? Yes.

13 MR. REXFORD: When Point Hope filed their lawsuit and
14 (indiscernible) also filed an Injunction which would have
15 stopped the lease sale, that's what I assumed.

16 MS. WARREN: Right. There was a lawsuit -- to get an
17 Injunction there's criteria that has to be met. And there was
18 just a recent lawsuit that was filed with Sale 202 which was a
19 Beaufort Sea Sale. And they filed an Injunction on that one and
20 the Court didn't --.

21 MR. LOMAN: Grant it.

22 MS. WARREN: Didn't grant it. And so, I don't know --
23 that's a legal strategy move for that party. And why or why not
24 they decided, I don't have the answer. I mean, that would be
25 something that, you know, to ask them or their legal --.

1 MR. REXFORD: Just one quick add to that. If the
2 Injunction, was like (indiscernible) lawsuit was rejected, does
3 that reject the whole suit?

4 MS. WARREN: No, no, no, no, it doesn't. No it doesn't,
5 no, not at all.

6 MS. ANNISKETT: The one that the State allowed to drill,
7 is that Exxon, the one where it got (indiscernible) and all the
8 other ones were, like, rejected or (indiscernible)? Yeah, the
9 sale of Exxon Mobil, like \$8 billion?

10 MR. LOMAN: No.

11 MS. WARREN: No.

12 MS. ANNISKETT: Over on the Beaufort Sea?

13 MR. LOMAN: No, the Exxon Mobil is not drilling anywhere
14 in Alaska's Outer Continental Shelf.

15 MS. ANNISKETT: Is that option actual?

16 MR. LOMAN: Point Thompson.

17 MS. WARREN: Oh, Point Thompson, that's the State, that's
18 the State of Alaska. That's through the State of Alaska.

19 MS. ANNISKETT: Oh, okay. On land, you said?

20 MR. REXFORD: Well, it's inside of the Barrier Islands.

21 MS. WARREN: Yeah and that's the State. The Outer
22 Continental Shelf starts at three miles and goes to 200 miles.
23 So, from three miles to 200 miles. So the State of Alaska,
24 their jurisdiction is from shore to the three mile.

25 MR. REXFORD: Well, to the Barrier Islands then.

1 MS. WARREN: Right from Barrier Islands out is where it's
2 measured at. So that's all -- that's under State.

3 MS. ANNISKETT: So they could only drill from three miles
4 from shore to 200?

5 MS. WARREN: Yeah and it depends on the Barrier Islands.
6 It depends on how they do the boundary of bays and all that
7 other, where the measurement starts. But, yeah, but Point
8 Thompson where they're drilling is State of Alaska.

9 MS. ANNISKETT: Do you know where the leases are up there
10 like Shell Oil and maybe ConocoPhillips?

11 MS. WARREN: Uh-huh (affirmative).

12 MS. ANNISKETT: They've been here and now we have been
13 taking belugas here and now taking walrus and -- when we're
14 sent locations and, you know, where the tags, satellite tags go
15 like the beluga and the walrus -- and it shows that they would
16 go out there. That seems like that, around their feeding
17 ground, maybe, out there. And those are where those leases are.
18 Plus, right around the sand spit here, there are like, polar
19 bear dens. I know that my son had come across one and the mother
20 had charged at him. And he shot the mother bear through the eye
21 because it charged at him. And now the baby is now at the
22 Anchorage Zoo.

23 MR. REXFORD: San Diego one.

24 MS. ANNISKETT: Oh, San Diego?

25 MR. REXFORD: Yeah.

1 MS. ANNISKETT: Okay.

2 MR. REXFORD: To warmer climates.

3 MR. LOMAN: Mike could you talk a little about this
4 Supplemental Environment Impact Statement that had to be
5 prepared?

6 MR. ROUTHUR: Sure thing. So the Judge asked us to do
7 more with the analysis, those issues that Sharon talked about.
8 And so we started to prepare a Supplemental Environmental Impact
9 Statement which we feel is -- pretty in-depth analysis and the
10 process also allows us to come out to all the communities and
11 hold meetings like this. It's a pretty focused document in that
12 it just addresses the issues that the Judge told us to address.

13 The first one of those was providing analysis of the
14 environmental impacts of natural gas development and production.
15 We didn't do that in the original document. After the original
16 document was published, some circumstances changed. And by the
17 time the Judge looked at it a couple of years later, he said,
18 well, you know different circumstances now. You got to --
19 really need to do that.

20 So we set out to do that analysis. So, to understand the
21 environmental effects of natural gas development and production,
22 we needed to know what kind of -- what exactly the activities
23 would be. And so to get an understanding of a reasonable
24 scenario to give something to our scientists to analyze, we
25 talked with our geologists in the Resource and Economic Analysis

1 Section of our office. Bob, here, leads that Section. So I'll
2 turn it over to him then to give you some more background.
3 MR. PETERSON: So that's where I get to comment and
4 especially let our geologists, you know, with the basic starting
5 point is, okay, we've already analyzed the oil. Do we see a
6 potential for gas out in the Chukchi Sea? And, if indeed we do
7 -- so we have to build a reasonable model for Mike's group and
8 others to have something to study. And, indeed, you know, we're
9 able to say here's a reasonable area in the Chukchi where we
10 have large structures. We think there's a reasonable chance of
11 oil and gas being there. We've already studied the oil and the
12 question is, okay, if there's major gas accumulation there and
13 the reason we put them together is oil has much greater value.
14 We still don't believe that gas -- a gas deposit, on its own,
15 could make it economically. So we think it would be associated
16 with an oil deposit where you had the added value of the oil
17 that would pay for an awful lot of the infrastructure. And then
18 gas development would be economic, you know, sort of
19 piggybacking on top of this oil accumulation.
20 We picked somewhere reasonable in the Chukchi, you know,
21 60, 80, 90 miles offshore, provided that the amount of drilling
22 oil and gas wells now would -- could be investigated. Of course
23 we're now looking at not only an oil pipeline to shore, but we
24 would have a parallel gas pipeline that would come on at a later
25 date.

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1 And let me -- I should make that point too. The most
2 reasonable development would be oil first and later gas. When
3 you develop a field that has both, you want to get the maximum
4 oil out so when the gas does come out of the ground, just like
5 at Prudhoe Bay. The gas has been pumped back into the
6 subsurface to keep the pressure high to get more oil out.
7 What happens then, of course, we hit the shoreline. And
8 the first thing we analyzed in the first Environmental Impact
9 Statement was the fact that you got to have a major shore base
10 and a major oil pipeline, several billion dollars worth of
11 infrastructure on shore. After a certain number of years,
12 around 15, your oil rates are beginning to climb. That's when
13 you begin to look at gas development. You would have additional
14 onshore infrastructure on the first line. You'd be, of course
15 prior to that, building a gas pipeline along the same right-of-
16 ways the oil pipeline. And the reasonable place for these to be
17 would be to tag -- to go across NPRA and hook into the current
18 infrastructure at Prudhoe Bay. The oil would, of course, hook
19 into the TransAlaskan Pipeline. The gas -- well, I don't know
20 yet -- Denali Line. All Alaskan Pipeline, who knows. But the
21 scenario would be a gas line hooking into that infrastructure.
22 Certainly a lot of environmental impacts were analyzed.
23 We also provide -- as I say -- I'm the Chief of Resource and
24 Economic Analysis. We also looked at some of the economic
25 aspects of this. And we would anticipate somewhere around a \$4

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1 billion onshore investment infrastructure. Some would come
2 earlier with the oil and the oil pipeline. That would be taxed
3 at the similar level we anticipate to what's at Prudhoe Bay.
4 And supplying -- I think between \$2 and \$250 million a year in
5 tax revenue to the North Slope. And then, at a later date,
6 you'd see a second expenditure as the gas infrastructure came
7 on.
8 So that's the -- you know, a reasonable what we think
9 could be discovered -- how it would be developed and how that
10 accumulation, that field, you know, would flow into the current,
11 well, flow into the system. Now having done that, we can now
12 have something specific that Mike's group can go, okay, now we
13 have something specific to analyze and examine the effects of.
14 MR. ROUTHIER: Yeah, now our scientists know, basically,
15 what could be entailed with the natural gas development, where
16 we go forward. And so, basically, we handed off that scenario
17 to our scientists, our Oceanographers, our Marine Mammal
18 Biologists, our Economists, all those people. And ask each one
19 of those to give their forecasts of the type of environmental
20 impacts that could result as -- result of those activities. And
21 we documented all those forecasts in this document.
22 Basically, this document -- we summarized some of the
23 findings and some of the facts from the prior original document,
24 you know, because we're building off that document. We're
25 supplementing the document. So we summarize after context and

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1 then we do specific analysis on that for gas development, you
2 know, installation of pipelines, things like that. And then
3 give the potential impacts of natural gas production, so its
4 normal operations through the years. And that process really
5 got at the first part of the Judge's brief.
6 The second part of the remand again was, the Judge found
7 that the Agency didn't do a sufficient job going through the
8 stipulated procedures for dealing with incomplete or missing
9 information. And basically he said, listen, just go back and
10 follow the procedures. All right, go through that exercise
11 again. Follow the procedures right, this time.
12 We had a pretty long list of these statements, these items
13 that implicated missing or incomplete information. That's the
14 exhibit that was alluded to before.
15 MR. REXFORD: Julius Rexford, for the record. Who did the
16 Environmental Impact Statement for the Chukchi Sea?
17 MR. ROUTHIER: That was our Agency in 2007.
18 MR. REXFORD: And, what -- what vessel did they use out in
19 the Chukchi Sea to do that Environmental?
20 MR. LOMAN: Vessel?
21 MR. REXFORD: Yes. Was there any ships or anything out
22 there to do studies?
23 MR. LOMAN: There have been ships and studies in the
24 Chukchi Sea.
25 MR. REXFORD: Which vessels were out there to do the

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1 studies?

2 MR. LOMAN: MMS has a vessel. What the heck's the name of
3 that thing?

4 MS. CODY: Fairweather's out there now.

5 MR. LOMAN: Fairweather, that's not ours.

6 MS. CODY: That's not ours. (Indiscernible).

7 MR. LOMAN: We have one. I'll think of the name in a
8 minute. But others and there have been -- you know, people say
9 amazing -- they know more about Venus than the Chukchi Sea. And
10 then you take a certain type of fisheries, or a certain type of
11 fish. And then, you know, they don't enough or they don't know
12 anything about it. Then you start looking and some of the
13 information is dated, a little bit old. More recently, because
14 of Sale 193, MMS has focused their attention on a lot of studies
15 in the Chukchi, maybe more now than ever before. But it's not
16 some black hole where we know nothing about like you read in
17 some of the major media outlets.

18 We were just down, at the beginning of this trip, talking
19 to the Native Village of Kotzebue. They're involved in a ring
20 seal study, working with NOAA on it. They have no idea that that
21 money comes through our Agency. All told, MMS and now the
22 Bureau of Ocean Energy Management Regulation and Enforcement has
23 spent well over \$300 million and studied the Arctic environment.
24 But we're not the only Agency or organization or entity that has
25 studied the Arctic environment. There have been many others.

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1 The North Slope Borough's library -- we had a meeting the other
2 day. Half of that library -- just, you know, a casual look, is
3 literally those studies that we've produced and they don't have
4 anywhere near all of them.

5 There is a lot of information, an incredible amount of
6 information. Will we gather more? Yes. It's under way. More
7 yet, yes. But there have been many, many vessels that have been
8 involved in scientific studies in the Chukchi Sea since the
9 early '60s. or maybe even before.

10 MR. REXFORD: I mean the Japanese and the Chinese are in
11 our waters with American scientists. And this is what we're
12 finding out in our Alaska Small Whaling Commission meetings.
13 And they're letting the United States -- was the only one that
14 had one in Arctic waters. And they're saying it's going to be
15 another six years before we get a working ice breaker which --
16 this is a long ways away, six to ten years.

17 I just want to echo some -- one of our elders' comments,
18 that has passed on. This is Point Lay, S-09 Table (ph) 54,
19 public hearings leading to offshore development have taken place
20 in Point Lay between 1975 and 2009. These hearings include
21 traditional knowledge regarding the traditional migratory routes
22 of subsistence resources, statistical hurdle to, without fail,
23 response observed effects of noise pollution on marine mammals,
24 cumulative effects of oil and gas development and current ice
25 conditions.

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1 The importance of the annual beluga harvest, including
2 maintaining the ability to protect their seasonal moves is
3 evident from comments made at public testimonies from 1987 to
4 2007.

5 In response to exploratory seismic operations, Point Lay
6 residents have expressed their concerns regarding the
7 accumulation of subsea noise pollution, pipe for offshore oil
8 and gas development. For example, in 1987 Willie Tugarook (ph)
9 testified regarding this concern.

10 I've seen the same thing happening in Kotzebue. The
11 belugas hardly going to Kotzebue Sound anymore, where they used
12 to be numerous. It might be too drastic noise pollution, but I
13 think some kind of a study should be made and included in the
14 Draft Environmental Statement before this lease sale takes
15 place. Willie Tugarook (ph) 1987 Sale 109, Point Lay. Thank
16 you.

17 MR. LOMAN: Thank you.

18 MR. NEAKOK: Not only Kotzebue Sound but also -- but the
19 port studies there. Kivalina used to hunt belugas. And -- but
20 now, you know, they're having a tough time, last 10 years after
21 they extended the port -- that dredge out or even when they
22 built the port, or started to build the port they started losing
23 their belugas. Migration would change for them. And they would
24 have to go way out -- the belugas have to go way out just to get
25 away from the noise.

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1 And also, just like what's going on at Cook Inlet, you
2 know, they're almost gone right now. When I was a little boy I
3 used to go out to, you know, Ship Creek and watch all the
4 belugas. You know, there would be hundreds of them, thousands
5 of them. Today you can almost hardly see 50 because of what's
6 going on with the Cook Inlet, you know, and all the oil
7 platforms and everything, all the noise, all the ship traffic
8 that's going in and out of the Port of Anchorage. And now that
9 they're moving up, you know, that has to be a sound, with all
10 the ships. They're losing their belugas. They have to go way
11 out there.

12 Now Kivalina -- they're going half, you know -- they're
13 losing their subsistence food because of the noise from the Red
14 Dog Port. And now you want just to come up here and start
15 drilling and we know that can happen to same thing to us too.
16 We've been hunting belugas ever since, what 1979,
17 '78, '79, maybe even earlier. And I don't want to lose my
18 subsistent food just because, you know, western civilization
19 wants to have oil or gas.

20 I know there's still quite a bit here on land somewhere.
21 But going out there, you know, rerouting our belugas because of
22 -- you know, their migratory routes they have taken for
23 thousands of years. I don't want -- I just don't want to see
24 that happen to us. I've talked with people down there in Cook
25 Inlet area that hunts belugas, used to hunt, you know, without

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1 getting a permit. Now they need a permit because they can't get
2 -- the belugas are endangered because, you know, all the oil and
3 gas, you know, noise that's going on down there.

4 You know I'd sure hate to have my grandkids or great-
5 grandkids start to have permits just to go hunt belugas because,
6 you know, they're so far and few in between if this thing
7 happens. You know we have a lifestyle here that we're adjusted
8 to. We live it every day. Global warming is right around the
9 corner, as we all know, because that ocean out there should have
10 had maybe one or two feet of ice already. You know, we still
11 have open water out there. And after that, you know, we're
12 going to have that -- maybe that Northwest Passage going to be
13 opening up. And that's really going affect our way of hunting,
14 our way of subsistence living, because of the oil. I mean, not
15 the oil exploration but, you know. ship traffic.

16 You know, and also you okay a pipeline that's going to be
17 going from the oil platform or whatever occurs, which I hope not
18 because. you know, I'm adamantly against, you know, offshore
19 drilling. You know, if it goes to that, you know, we got oil
20 pipelines going underneath, you know, the ocean bottom. Then
21 they come in on shore. Then we have, what, five, 600 miles of
22 pipeline. That's going to affect the migrational caribou. I'm
23 worried about the caribou, too.

24 Migratory birds, you know, they're going to have pump
25 stations in between. I know that, as they do with the

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1 TransAlaska Pipeline. But, you know, it's -- you know I've
2 started be a victim of what's happened -- been going on with
3 Cook Inlet, Kotzebue Sound and Kivalina.

4 You know, I don't want us to lose our way of life that
5 we've been living for thousands of years. And, that's just me
6 you know. I love this country. I love this State and I love
7 this nation, but you know.

8 And you can find an alternative ways of, you know, energy
9 -- there's quite a bit out there. We've got smart scientists
10 out there that can turn corn into fuel. You know, it's just --
11 it's just staying out of that and especially for this area here.
12 Especially when Beaufort Sea -- I'd sure hate to see them lose
13 their, you know, traditional way of whaling of bowhead, food
14 that we need, each and every year, to sustain us during the
15 winter.

16 As for us -- beluga, we harvest our beluga every year.
17 And we need that to sustain us, you know, during the winter. It
18 keeps us warm, fed, our families fed. You know, we just only
19 spend like \$20, \$30 on shells. But then when we try and buy
20 alternate food like steaks or hamburgers or french fries, you
21 know, they go over -- like five, six, \$700, maybe over \$1,000
22 every year. And here it only takes us \$20, \$30 worth of shells,
23 you know, to sustain us with beluga. Or even bombs that we need
24 to harvest bowheads with this, you know. You just don't want to
25 become a victim of western civilization because of oil

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1 exploration and your drilling.

2 Because I'm sure I can see what's going to happen, you
3 know, like what happened in the Gulf of Mexico. And with the
4 Exxon Valdez, those people are losing a lot. Here we're going
5 to be losing everything. We live off the ocean. We live off
6 the land. And if an oil spill happens out there, we have no
7 more belugas. We have no more bowhead. We have no more seals.
8 We have no more fish. We have no more migratory birds. And
9 also, you know, if they say they're going to come through and
10 make barriers so the oil won't go into our lagoons, someday it
11 might be too late. Then we'll lose everything on land. I'd
12 just -- sure hate to see that in the future. That's just the
13 worst case scenario that I might be thinking of, or what we
14 should be thinking of. Because that -- that ocean currents out
15 there go all the way around Beaufort Sea, Arctic Ocean, Chukchi
16 Sea, Bering Sea. It goes all up and down this coast, west coast
17 of Alaska.

18 I know it might be small and I might be a small and
19 insignificant person talking. But, you know, I just don't see
20 what's going to happen, worst case scenario when you know it's
21 going to happen. Because this affects not only me, not only my
22 grandkids, but my great-grandkids, all our great-grandkids.
23 Because I want them to enjoy what I enjoy today. I love my
24 Native food. I love to fish, hunt. And I sure can't lose that
25 just because they, you know, haven't found ways of getting oil

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1 and gas to the market. Like I say, I love this State. I love
2 this nation. but we're going to be the victims if something
3 happens like what happened in the Gulf of Mexico and, you know,
4 Prince William Sound. Thank you.

5 MR. LOMAN: Thank you. Did anybody have any questions
6 about the Draft Supplemental Environmental Impact Statement?

7 MS. TRACEY: If they don't give their testimony, do they
8 have another time to do that?

9 MR. LOMAN: Well we're taking comments.

10 MS. TRACEY: Tonight?

11 MR. LOMAN: Yes ma'am. We're taking comments until
12 November 29th.

13 MS. ANNISKETT: I'd ready to give mine. I'm a skin sewer.
14 I use the animals for fur. I make the (indiscernible) from
15 Point Lay, a long time resident. I've gone to boarding school.
16 I'm a Point Lay Corporation Shareholder, a Secretary. I'm a
17 North Slope Borough full Board Alternate. I'm a SAC, North
18 Slope Borough School District Member, a Native Village of Point
19 Lay member in the Council and a member of St. Elfin's Episcopal
20 Church.

21 And I don't know where to start. I feel like there's not
22 enough facts to approve sales for drilling. We have a whole --
23 again, I have -- repeat this about a hundred times -- migratory
24 area, the whole area -- animals, fowl, mammals, fish, walrus,
25 polar bears. And if they do have an oil spill, the winds -- the

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1 wind's going to play a big part of it -- the danger of inhaling
2 due to asthma residents. I feel like the Exxon was unfair to
3 fishermen, the money due to them. I don't think they were
4 adequately paid, if they were at all.

5 This would hurt the animals, the bird hunters and animals.
6 They use birds, seals, et cetera. I need to put my other
7 glasses on. My glasses are too weak. Okay, the animals that
8 were hurt with oil, which were badly covered with oil or they
9 were killed from the oil spill. We have tagging animals like
10 Marie said. These animals are all important to us.

11 This whole area is a feeding ground for the wild animals.
12 I love my land and want to protect it from harm. I feel it is
13 my responsibility as a subsistence hunter and user. I sew. I
14 use the fur for clothing, for example seal, polar bear,
15 wolverine skins. We use the wolf for mukluks and bottoms. And
16 we use the wolf skin, wolverines for trimming our parkas due to
17 the cold weather. We have caribou. We use the sinew to sew.
18 It's like the thread. And the caribou for the tops of the boats
19 and for parkas and skin socks. We use the fur of the caribou.
20 And we eat the meat of the caribou, due to our limited income in
21 our village. That really is -- they fix berries, cranberries,
22 blueberries, salmon berries -- the food we eat, beluga, duck,
23 seal. Seal we make for our oil, we take care of in the summer
24 for the whole winter. The beluga -- salmon -- we do have
25 fishing salmon. We do have whaling. We do have fresh water

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1 grayling.

2 And, if there was ever an oil spill, it would really
3 damage our water area. I feel like our water, our water lake.
4 And from the caribou, we dry the meat for the winter and put it
5 away. So these are really important stuff. As a woman, we take
6 care of all these. And you have a hunter that goes out hunting.
7 The urooaguk (ph) we use for covering skin boats and the caribou
8 to sew -- the sinew.

9 Don't worry, I don't have lots, as much. And I want to
10 express our beluga annual hunting. It's a big thing for this
11 village. And we had just recently got a quota for whale. And
12 there is a procedure and a way that we do for beluga. We have a
13 meeting and we get all the captains and co-captains for each
14 boat. We sort of try to figure out how many boats we're going
15 to have and we all have -- we all elect. We have a meeting date
16 and a church blessing for our beluga hunt or walrus or bowhead.
17 And the Captain is picked by the residents. So it's very
18 important for us to listen to our Captain. We have to show
19 respect. We work with our Native Chief. We're informed --
20 someone's always watching out for the wild animals when they
21 come in. We collect gas for hunters. And there's a whole
22 procedure of how do we go out hunting. So it's not just what we
23 hunt out there. We try to show respect for our land. And we
24 have buoys with harpoons, which we have to take care of. And
25 the guns -- and there's rules of how we have to shoot and

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1 harpoon the beluga.

2 And all this we teach our younger people and haul them
3 into the shallow water in the lagoon. There is a certain order
4 we give. And we listen to the Captain when he says to shoot.
5 And then we haul the belugas to cutting hill. Then, when it's
6 nighttime and they haven't slept for hours, they go home and go
7 to sleep. And then we have the youth, which watches out for
8 belugas across there. And then next day we start cutting.
9 Everyone is responsible to go and help. And with -- to cut up
10 with our ulus and knives. And we divide all the belugas to how
11 many house -- houses we have in the village. And this is all
12 the rules we have to follow. It's just not one big picnic.
13 It's a lot of hard work. You have to be permitted. And we
14 really respect this land. And we try to respect each other in
15 what we do.

16 I can't think of anything else. But I'm sure I'll think
17 about anything. But this sewing is really important to me
18 because I'm a skin sewer. And we do need all these warm parkas
19 when we go out whaling. Very important to us for the wolverine
20 and wolves, the animals and the seal to make mukluks and mittens
21 and parkas, jackets. And you have to know how to sew. Real
22 important where you don't have oneself or your family and you
23 have to pay someone to sew. So it's very important to know that
24 knowledge of how to make a boat, a skin boat and the outboard
25 and the gas and the ski-geos. And, everybody have their own

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1 little part in whaling. So the Captain is always the head of
2 each whaling crew. And it's real important that people listen
3 to him and how to respect. We have Inupiat values which are
4 very important to us. Thank you.

5 MR. LOMAN: Thank you. Thank you and I have a question
6 Lily. You talked a lot about communication that takes place
7 between the people who are involved in subsistence activities.
8 And so I have to believe, but I would ask you. The terms in the
9 Inupiat language that are exclusive to those activities, if you
10 weren't conducting those activities, that part of the language
11 wouldn't be used right? You have no other reason to say some
12 certain words about certain actions?

13 MS. ANNISKETT: In everything we do we use Inupiat values.
14 We have some up there and my dad's -- one of them when he was
15 younger was charity. I won't say what (indiscernible) was
16 changed to certain thing. We used to worry, worry night, day.
17 Deal with life, serious situations. We have -- we were taught
18 to respect the elders, very important. And if you don't teach
19 that it's a shameful thing to see.

20 And we have men that teach our younger generation which we
21 do a lot of with the beluga and whaling. But I think that we
22 can do more in taking out the youth in caribou and showing them
23 how to cut the caribou and not waste. The elders always remind
24 you, do not waste. We had Charlie Tuckville (ph) who was always
25 taking a part to show people if he sees someone wasting

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1 something that, you know, he scolded them on the CB or go to
2 them and tell them. Almost everything we do in life we have law
3 -- laws that we listen to under respect for the people.

4 UNIDENTIFIED MALE: There's over 100 words to explain
5 types of cheong (ph). Hundreds of good words in our language.

6 MS. ANNISKETT: It's easier for us to understand what is
7 happening in your family. It's more -- it's not -- the thing
8 is, you could only say certain words and it means just a little
9 handful of stuff. But Inupiat, it could mean a lot of stuff,
10 you know. All of our hunting we have back from generations to
11 generations and all sort of to take care of your neighbor, and
12 share.

13 MR. REXFORD: Ice conditions in the oceans there's
14 hundreds of terms to use in what type of ice conditions.
15 There's hundreds of terms for the ocean of ice. Just like the
16 snowing -- we have hundreds of ways to interpret what type of
17 snow and the condition at sea. And how it connects to the sea
18 ice when the snow falls onto it. There's terms that we use.

19 MR. LOMAN: But you mentioned that young people learn to
20 respect certain and have -- and develop values for things, not
21 waste things. In your experiences, anyone, did subsistence
22 activities teach you things like being patient?

23 MR. REXFORD: Yes.

24 MS. ANNISKETT: If you don't get a duck bird, I could be
25 vicious.

1 MR. REXFORD: When I first started hunting, I used to
2 (indiscernible) and the ducks would already have gone over.
3 But, then, later on I got more patient and, like duck hunting,
4 or waiting for caribou. There's certain places where we go and
5 just sit down and wait for caribou that -- they come around.
6 And, same with fish. We know the currents, certain winds that
7 the fish don't come in. They don't go in the current. They go
8 towards the current. Same with the beluga. When we drive them,
9 we have to know that the current is coming out of the lagoon not
10 going in. Otherwise, they will not follow the current into the
11 lagoon. And there's a -- it's all -- it came through
12 traditional knowledge. One year we had a strong current going
13 in south, southeast wind. There was -- we had hundreds of
14 belugas in front of us and they were not going. We tried
15 pushing them. They weren't going to go in. This traditional
16 knowledge of the currents, you need to know them in these areas.
17 I mean -- have you studied the currents in the Chukchi Sea yet?

18 MR. LOMAN: Very recently, through some pretty amazing
19 technology you can actually go online and get some data on
20 currents, real time now. And I have to believe that this is
21 going to advance -- you know the advances in IT technology are
22 increasing so fast, if you draw everything, all technology since
23 the beginning of man -- we don't know long ago that was, but
24 let's go back a 100,000 years. And we draw it on a graph -- if
25 we put it on a wide graph, it looks like everything happened

1 yesterday compared to all those tens of thousands of years
2 before we got to the telephone. And that would be the one that
3 you dial it, you know. And since then, all of these things that
4 we have in our pockets and our hands that we look for this
5 information, but all of those things don't, at least for me, do
6 much for my welfare. Don't teach me patience, probably the
7 opposite. Don't teach me manners. Teaches me bad manners.

8 But, you know, part of this law NEPA requires us to take
9 public comment and be open about what we're doing. We talked
10 earlier about 40 pages of scientific uncertainty that was listed
11 in the old document. I think we'll always be learning about
12 what subsistence activities mean to the people and to their
13 well-being. You can learn it but you can't really understand it
14 and it can't be in a meaningful way without really, you know,
15 really talking to people and seeing what it really means to them
16 like this opportunity here today.

17 That means a lot more if and when I'm back in Washington
18 D.C. or any of us and some decision maker wants to make a big
19 decision like they did on the Chukchi Sea Sale. They don't have
20 the opportunity like we do, forced by this law to come up and
21 talk to you. And the other thing that NEPA does, it requires
22 you to analyze the effects on human health. And human health
23 now, by the international term, and we believe that it's true --
24 means well-being.

25 So, you know, I talk to people and I don't know exactly,

1 because I didn't grow up in this community. I grew up in a
2 different reservation environment where some people practice
3 subsistence lifestyles but, you know, it's subsistence important
4 with respect to dealing with things like sadness, loneliness,
5 these kinds of mental health that involve our well-being. It
6 seems to me, when I talk to people, it does. People are much
7 more excited about hunting season, whaling. I've seen in Barrow
8 even older men, like my age, getting very excited like kids
9 about the possibility of spring whaling. And so those are the
10 kinds of things that we bring from these meetings that are most
11 important.

12 MS. ANNISKETT: You could feel it in the air when there's
13 nothing there and everybody's moving. Everybody's running.
14 Everybody's doing something. You could feel it, the excitement.
15 Everyone sees and there's a different climate.

16 MR. REXFORD: Anyway I'd like to --.

17 UNIDENTIFIED FEMALE: Did you make copies?

18 MR. REXFORD: Can I read these out, the ones I read
19 earlier in the prior meeting?

20 MR. LOMAN: You bet. Let's get them on the record.

21 MR. REXFORD: Yeah my name's Julius Rexford, for the
22 record. What are the areas where oil activities should be
23 excluded before and during beluga whaling and bowhead whaling?
24 Where's Lucy?

25 UNIDENTIFIED FEMALE: She's gone to make copies of -- she

1 go get the copies.
2 MR. REXFORD: Should she have my --
3 UNIDENTIFIED FEMALE: Originals?
4 MR. REXFORD: Yeah.
5 MR. LOMAN: She steal some pages?
6 MR. REXFORD: Well she took my -- the ones I had with the
7 answers. I had answered them on it.
8 MR. LOMAN: I remember the answers. You ask the
9 questions. I'll give you the answers because I remember it from
10 earlier. What areas? All the areas where those subsistence
11 activities are taking place with those research --
12 MR. REXFORD: I mean -- we can just sit down.
13 MR. LOMAN: Here she comes.
14 MR. REXFORD: Do you have a copy of my papers?
15 MR. LOMAN: We need the answers.
16 MR. REXFORD: Okay. What are the areas where oil
17 activities should be excluded before and during beluga whaling
18 and bowhead whaling? That answer is simple, stay out of the
19 ocean, the whole Arctic Ocean.
20 What are the time periods when oil activity should be
21 excluded? April, May, June and up to July 20. If companies
22 wanted to keep their vessels or drilling equipment in that area
23 during the exclusion periods, where should the equipment or
24 vessels go? One hundred miles out.
25 Is there a limit on the number of operations that should

1 be allowed before the exclusion period begins? One operation at
2 any time.
3 Are there any restrictions that need to be applied to
4 vessel transits? They should be monitored through COM Centers
5 in each Chukchi Sea Village, Point Hope, Point Lay, Wainwright,
6 Barrow, well before going into the Beaufort, to Barrow, Nuiqsut
7 and Kaktovik.
8 Are any other restrictions needed? Zero harpoon
9 discharged 100 mile buffer zone, very (indiscernible) activity
10 and quiet period from April, May, June, July and July 20. And
11 quite period in the fall, September 10, was the date we had
12 selected between Point Hope and Point Lay. But Wainwright was
13 different.
14 Okay, going down to Item E, Point Lay, at the completion
15 of the Point Lay beluga hunt, then seismic can begin. Hunt
16 Coordinator will make a call to operators about start
17 (indiscernible) into the Chukchi Sea after the hunt or until
18 July 20th, you know. The day of the hunt, beluga hunt day -- if
19 we're done with the beluga hunt before the July 20, we just make
20 a call to the operators, offshore operators, to say, we're done
21 with our beluga hunt.
22 And when we presented this July 20 date back in '09,
23 during the '09, to Shell Oil Company, they said they wouldn't
24 sign the CAA with that date. And that they -- they threatened
25 us with not opening our Town Center, which they didn't open it.

1 Nobody worked. We didn't mind. We didn't want their money
2 anyway. And it didn't happen. So, they went through with their
3 threat. They put -- three people were out of a job, so -- but
4 they were open -- they had their Council to open this year.
5 Okay Point -- it says same as Wainwright.
6 Point Hope -- stop whaling in end of May. If ships come
7 by around July 20, that would be fine with Point Hope. Support
8 other villages. Vessel should be required to transit well
9 offshore, yes, 30 to 50 miles offshore.
10 Monitoring Needs. Should the AEWG require monitoring of
11 additional subsistence resources? Yes. All of the other marine
12 mammals should be monitored. The bearded seal is used for the
13 skin of the umiaq. And the spotted seal blubber is used to oil
14 the umiaq frame.
15 Should the AEWG put the oil industry on notice that a
16 comprehensive baseline study program will be needed starting
17 next year? These were written up in, I believe, '09.
18 Katovik and Wainwright, Barrow, Boroughs to the northeast
19 of Barrow, September 10 to end up whaling season, same as
20 existing CAA, generally 30 miles away. Submit and follow a
21 schedule of operations with the AEWG.
22 Same as four. Ensure that no unmitigable adverse impacts
23 -- language be included. Also need the safe harbor language
24 from CAA. No Captain Hazelwoods.
25 And, I don't know if you are familiar with how the CAA

1 started with -- started back in, I don't know April
2 (indiscernible) I believe? And it was because of Nuiqsut and
3 Aktu (ph) were the most impacted communities at the time. And
4 CAA just -- it's been an agreement between the AWC and the oil
5 industry, basically to, you know, so that the whalers could have
6 a safe hunt. And bountiful hunt to that harvest of whale for
7 whales in the safe manner. And, in the past, in the Beaufort
8 Sea, there was drilling going on in Camden Bay. And my uncle
9 lives in Nuiqsut. His name is Archie Akiokmak (ph). He was
10 former Commissioner for Nuiqsut AWC (indiscernible). And
11 retired last year due to health problems. And he said, when
12 they were drilling in Camden Bay and seismic going on in that
13 area they were at, they took a whale. But they were 30 miles
14 out.
15 And then the big winds came and they had to cut their
16 lines and let the whale go -- to go, you know, for safety. For
17 safety -- life, health and safety is more important than the
18 whale.
19 And I've been in situations -- we're in fog whaling in
20 Barrow where 11 boats unhooked and we stayed hooked up on an 18
21 foot boat. And 11 boats -- I mean these were the big boats that
22 unhooked. Mr. Tom Brower, his whale we were towing and our boat
23 started unhooking and going around the point while we were still
24 towing. Seven boats were the only ones that towed the whale in.
25 But we got -- when we got there, it was breaking waves on the

1 beach and (indiscernible) I don't know how long to the beach.
2 We endured some, you know, it was the biggest year of the whale,
3 which we did. The whale was 52 feet and it was shared between
4 seven, eight, with the people that cut it up. So it was a
5 pretty good -- good sharing that day.

6 And I'm against offshore exploration and drilling, period.
7 I believe we have enough gas and oil on land to sustain our
8 needs and the United States for years to come. And that
9 drilling in our ocean is one of the biggest risks that the
10 United States is going to take.

11 And unknown conditions here can have hurricane force
12 winds. Some years we had winds up to 70, 75 miles an hour. And
13 these drill ships, they say they're going to jack them up sixty
14 feet above the water. But, can they sustain heavier waters --
15 heavier salt waters from the wave action? I mean you said the
16 salt salinity is higher above surface and in cold surface --
17 cold surface salt water and it's heavier. And with the wave
18 action, it can move anything. And someone else should come too.
19 Thank you.

20 MS. ANNISKETT: Lily Anniskett. There was a death in
21 Point Hope where else our -- the whaling Captain and his crew or
22 family would be here also. But they chartered -- elder that
23 passed away.

24 MR. LOMAN: I thank you.

25 MR. REXFORD: Thank you.

1 MS. TRACEY: These different oil companies that come to
2 our region, that come to the (indiscernible). They talk to us
3 about wanting to preserve our culture and preserve our
4 historical sites. And yet, at the same time, we believe that
5 the ocean is our culture and our historical sites.

6 For years now we come past -- we used to have our caribou
7 meat for our whole family, for our whole village -- feed the
8 village. That was our main meat dish. Now, with the scarcity
9 of the caribou not coming around to Point Lay, we depend heavily
10 on our sea mammals for food. And it scares us to death, almost
11 to death, that people that don't live around our area, want to
12 come up here and drill and make rules for us and say, okay,
13 we're going to drill in your ocean, whether you want us to or
14 not. And here we are we're talking and asking you not to do
15 this against our wishes. But you'll do it anyway.

16 We talk about wanting our grandkids and their kids to and
17 grandkids to hunt the meat, what we are presently eating. We
18 work hard for our food like my sister said. We dry meat during
19 the summer. We make oil during the summer. And every season
20 it's a different season of different types of food. And we
21 don't have gardens to grow anything. The ocean is our garden.
22 It provides us food. And recently, after 73 years, we had
23 gotten a whale. We praise the Lord for that. And that day was
24 a lot of food for the winter.

25 But without beluga hunt, when we herd the beluga with

1 boats, and the whole village participates. And this is how our
2 young ones learn from us that we learned from our elders. And
3 we continue to teach our young ones how we do things, how our
4 ancestors do things, that they had been doing for thousands of
5 years.

6 And now, with the scarcity of ice in our ocean, the
7 changing of our weather and the changing of tides, I guess the
8 whole world had heard about our walrus hollow. People were
9 calling here on the phones. Our phones were ringing. People
10 were calling and saying we want the truck -- we would like to
11 rent a truck when we get off the plane in Point Lay. And we
12 would like to rent a boat. And we would like to take these
13 people and go to the walrus.

14 We want to -- and we want to come and take out the
15 tourists and come and fly over the walrus so that they could
16 take pictures. We've had polar bears down there while the
17 walrus was here. They're stampeding, natural stampeding and we
18 don't need the two-legged race racing down there to take
19 pictures, just to show what we have here. We've been trying to
20 protect the walrus here and try to keep them from stampeding.
21 But then, at the same time, we can't keep the polar bears or
22 bears away from them. When the wind is right, we can smell
23 them. The stench is very strong. And if there is no ocean and
24 the wind is right you can smell them. If you can't hear them,
25 and you could smell them, then you know they're nearby.

1 MR. REXFORD: If you've been near a big farm, that's what
2 they smell like.

3 MS. TRACEY: Anyway, we've had pregnant women walking
4 outside, they're trying to vomit. That's how bad it was. But
5 then, at the same time, it was good to have them here. We could
6 hear them. When you're outside, they're loud. They're like a
7 real loud crescendo, you know, and then they don't have anybody
8 doing this for them, like the orchestra or the bands, you know.
9 I mean, they're like, wow. You know, and very harmony. I mean,
10 you know, each one of them wanted to be louder than the other.
11 But we go into our houses and we try to sleep, but we could hear
12 them.

13 It's a beautiful song. But then the scarcity of ice down
14 there, it kind of scares us. I mean they were like tens and
15 thousands and thousands of walrus down there on the beach.
16 And what they do, is that they crowd there next to each other.
17 And they're crowding out each other and the beach would get
18 full. The sandy beach would get full of walrus. And there
19 you could see walrus out there in the ocean. And they're
20 still coming up to the beach. And then once they're on the
21 beach, they're being pushed up to the grassy area. And then as
22 more come up to the beach, more walrus are getting pushed up
23 onto the grassy area. Boy, this is a sight to see.

24 It was beautiful. I -- you could see -- it's like you
25 know when you see the ocean, you could see brown -- brown spots,

1 brown lines in the ocean. Just -- it's all walrus. You know,
2 you could see their tusks when they come up and they're -- and
3 the ones nearest land they're big. I mean, they're huge. You
4 know, and they're moving and the ones that were tagged, the ones
5 that we have seen, that they have sent us the direction that
6 they would travel, we've seen them go to that same area where
7 there's lease sales out there. You know, like Shell Oil and
8 ConocoPhillips and the other industries. And it's probably the
9 only reason they go out there is probably to feed. And that's
10 around the area -- the beluga too. They take beluga.

11 And recently for three years and this was the last year
12 that the Loon Project was done by University of Alaska
13 Fairbanks. Vizo (ph) and his crew were here. Every summer for
14 three months they were coming here and camping out there and
15 taking pictures. You can see the one up there -- there's a new
16 picture over here. You know, they -- satellite based on them
17 and then they send us the migration or the -- it's amazing.
18 Some of these go to Malaysia, I mean. And then there's -- you
19 know, some of them go down south and (indiscernible). It's
20 amazing. I mean, I'm glad these people come and take the
21 walrus, the beluga, the loons, the seals, you know. What can
22 I say but say, thank you? I have a lot of information. But now
23 I'm kind of getting a little overwhelmed now.

24 But then all these things get passed down to us from our
25 ancestors. And we learn from them and then we teach the young

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1 ones that they want to learn from us, you know. So we do our
2 best to try and teach them. And every season is a different
3 season for us. Different mammals, different animals, different
4 kinds of birds, but the ravens are always here.

5 But I would like to thank you, guys, for coming here to,
6 you know, get our input on our village, our village life and the
7 animals and mammals and fowls that we have here. I know this is
8 such a strange place for you guys to be. But I see bears
9 walking out there -- and the weather does get worse than this
10 so, you know. It's just our way of life and we love it here.

11 I was born in the old village down there. Yeah. And I,
12 as soon as I turned six I went to Wrangell to go to boarding
13 school. And then I graduated from eighth grade from there. And
14 then I went to Chimal (ph), Oregon for high school for four
15 years. So I was away from my hometown, my parents, for nine
16 months out of every year. So, that's the story of my life. But
17 I really missed my parents, you know. I recently lost my Dad --
18 simply become sick. And he did a lot of hard work for us. You
19 know, like hauling coal from up-river for our winter supply.
20 Getting ice from the pond, ice pond, and bringing it into the
21 ice cellar for the spring, for springtime during breakup. And
22 it's just, a lot of the stuff that happens here is very awesome.
23 You know, if you don't live in a small village. And in a small
24 village you have to help, you know, and that's just life here.
25 Thank you.

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1 MR. LOMAN: Well, thank you.

2 MS. ANNISKETT: Our father just went to -- fifth grade and
3 they thought it was very important for us to get educated so
4 they sent us out. We were poor and when we were young, when we
5 had dog teams, my Dad was able to find a job at the Dew Line.
6 Jobs were rare in the (indiscernible). That's part of the
7 situation people like to move out also. But we love to care.
8 Thank you.

9 MR. NEAKOK: You know we talk about traditional knowledge
10 and how you know you folk's western civilization. But we talk
11 about -- we tell you folks what we do -- how we live -- how we
12 live during each season. We pass it on to you yet when you go
13 back to Washington you know traditional knowledge couldn't
14 (indiscernible) anymore. That's how I see it because you know
15 (indiscernible) and that kind of (indiscernible). Nuiqsut they
16 have their traditional knowledge. They told me it's why it's
17 complicated -- this is where we get up -- this is where the
18 migration of the caribou come. This is where the bowhead
19 migrate to the ocean. These are where the ducks molt -- these
20 are where the fish you know come every summer -- every fall --
21 every winter yet when Washington hears about it you know it
22 seemed like you know kind of (indiscernible) our land. That's
23 how it is.

24 And here Nuiqsut you saw the (indiscernible) to what a
25 company. They lost their fishing for some of them. They lost

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1 their caribou. They have to go out past the pipeline in order
2 to hunt. In the past before the oil companies came they were
3 able to go out there and shoot a caribou. Now they have rules --
4 - regulations. Traditional knowledge for them went out the
5 door. Why should (indiscernible) turn to hear about it. Or
6 think what they hear about it. Now they're surrounded by three
7 sides and now they want to close their backdoor to them -- threw
8 it out there in the ocean in the Beaufort Sea. I feel for those
9 people that hard to go and pay eight or nine dollars a gallon --
10 you know what (indiscernible) whaling have 2.52 gallon here
11 (indiscernible) -- even cheaper than they do in Fairbanks.

12 Again you know traditional knowledge seem like doesn't
13 matter in Washington. Yet it matters for us because we live it.
14 It was passed on from generation to generation. It's not even
15 written -- passed by word of mouth. That's how we survived up
16 here in the cold and the darkness with the bugs. All the
17 mosquitoes. They try to (indiscernible) use different stuff to
18 you know heal ourselves. The different plants that we need --
19 the different berries where to pick them. All passed down by
20 word of mouth. You know we just (indiscernible) maybe
21 Washington to see traditional knowledge in small letters.

22 You know I (indiscernible) just last month. It hasn't
23 really (indiscernible) on the North Slope to be subjected to
24 what's happening in (indiscernible) right now but now they want
25 to -- like I said earlier -- now they want to close them off

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1 through the ocean. Just like the surrounded by western
2 civilization when they could be proud of Inupiat. You know they
3 got their dividends from the oil and gas land but
4 (indiscernible). You know their land that they lease every year
5 to the oil companies. Pretty hard to see that you know why
6 Inupiat values over there we talk to NOAA but yet they still
7 have it in their heart -- in their minds. This is how we do
8 things. This is how we seclude. They still have their hunting
9 -- their whaling -- their fishing yet they're limited because
10 why should they stay when they could go to a. The oil company
11 say zero tolerance on (indiscernible) yet in the newspaper we
12 hear Prudhoe Bay got oil spill -- explosions. You know people
13 give them (indiscernible) and yet they say zero tolerance when
14 they come to our village.

15 We will not have an oil spill (indiscernible) that paper.
16 Yet you know mechanical (indiscernible) you know it still
17 happening and yet they're still out there drilling. The people
18 let the oil companies go out there and drill and something like
19 that happens like I said earlier in the Gulf of Mexico and
20 Prince William sound. You know that's. You know they promised
21 us that there wouldn't be able to have an oil spill -- they
22 probably promised those people down there in Mexico too. We
23 will not have an oil spill but yet look what's happened. The
24 oil company weeks it took to cap that well. I was watching that
25 thing every day. Watching all that oil come up. Our people has

1 been affected by it and all the animals that are affected by it.
2 I don't want to see that up here or in Beaufort Sea.
3 Because all the coastal people live off the water. We
4 live off the land yet when you folks leave here and when
5 Washington hears about traditional knowledge it doesn't
6 necessarily. We might talk about it here but then when it
7 reaches Washington (indiscernible). That's why I'm so adamant
8 about you know finish what's on shore first -- drill wherever
9 and be but out in the ocean that's the place I want to see in my
10 lifetime especially out here in Chukchi and Beaufort.

11 Traditional knowledge -- our kids are learning that by
12 word of mouth as it has been gradually been passed on to us.
13 Now with my kids and with that kind of set on -- we learn from
14 everybody here. How we do things -- how we survive. You know
15 I'm on the Search and Rescue to and I (indiscernible) see
16 anybody stuck out there overnight especially this time of year.
17 While the summertime too. We're just like that and we're stuck
18 out there somewhere and yet something bad comes it happens to us
19 -- sort of like a worst case scenario (indiscernible). Pipeline
20 being filled all the way from -- maybe I should (indiscernible)
21 between Wainwright and (indiscernible) Trans Alaska Pipeline.

22 The Environmental Impact Statement on that
23 (indiscernible). I was just going to be -- maybe I ask pipeline
24 from platform to the shore how is that going to be
25 (indiscernible)? That's going to have to be a four or five or

1 six hundred pages long. Who has the time to read the EIS -- to
2 say yes, yes, yes -- looks good -- looks good. I know it would
3 probably take me a couple of years just to read the EIS form for
4 the whole packet.

5 People say EIS looks good. Somebody who's paid to have sit
6 down and read it. What (indiscernible) here trying to survive
7 in our small village. Every season -- fall -- (indiscernible)
8 and summer. Yet people come here and say yeah EIA good to go.
9 We're going to fax it out to Congress so they can pass it. So
10 go out there and do it. In that case you'll have -- you'll find
11 lines that you know even enough to where oh yeah we can do this
12 -- we can do that because it's already by Congress.

13 You know I sure hate to see my grandkids lose the food
14 that we harvest each and every year. Traditional knowledge that
15 we have -- that we hold onto dearly each and every day. Even
16 during daily life when we talk to each other we're passing on
17 traditional knowledge. I ask the people how's the ice -- how's
18 the seal -- how's the river -- still passes traditional
19 knowledge to me because I want to know and if somebody's wants
20 to know from me I pass it on to them. I don't go to dinner and
21 gladly tell them and say here. I pass it on by word of mouth.
22 Yet when it goes to Washington it disappears.

23 People come -- Shell -- Conoco -- they hear about it yet
24 when they leave so does the traditional knowledge that they hear
25 from one goes out the window. They talk about it maybe briefly

1 yet they're talking about the EIS what they going to do -- how
2 they going to do -- how can our (indiscernible) this state --
3 the nation? Yet our traditional knowledge is at the bottom of
4 the (indiscernible) board. I just hope that something comes out
5 of this to where you know we can stop the drilling that's
6 happening out there. I don't (indiscernible) Chukchi Sea
7 (indiscernible). Beaufort Sea and say there are a lot of people
8 in the North Slope that are agree with Conoco or Shell but yet
9 about 90 percent are saying no. I seen it coming. We live here
10 -- people that come here don't -- they don't change the way we
11 live. We don't see how they live yet we see it on TV -- how
12 they do things. How they tell us you know we won't do this but
13 yet it happens. We live here -- we love it here -- we care for
14 each other each and every day.

15 When somebody sees a brown bear or a polar bear or fox
16 they get on the vhf and say hey something's coming to our
17 village -- everybody's on high alert. Yet in Anchorage
18 (indiscernible) you know when something happens to somebody you
19 know -- if they're a friend of mine (indiscernible). Didn't
20 happen to me -- I'm okay but yet -- we have family here. We
21 have friends here that grew up -- we care for each other. We
22 care for our land to put meat -- we hope that you know that we
23 can pass it on to our kids and grandkids and beyond. Hope that
24 like I say something good will come out of this rather than an
25 oil spill out there in the ocean and affect our way of life --

1 our way of subsistence.
2 You haven't showed me how we going to clean up oil under
3 the ocean ice. It's the (indiscernible) we have out there. Or
4 in broken ice yet they have boats registered to go out there in
5 the summertime. They show us that they can burn the oil on the
6 ice. Creating another problem with pollution that's going out
7 to (indiscernible). That's why (indiscernible) ice up here on
8 the North Slope. There's a lot of the country you know don't
9 care whether they're polluting the air or not -- they're just
10 trying to get (indiscernible). (Indiscernible) expecting less.
11 Our Arctic -- deep arctic ice -- North Pole ice is shrinking
12 dramatically. Ice out there in the ocean is not as thick as it
13 used to be -- 15 years ago even maybe 10 years ago.
14 15 years ago the ice would be thicker than this
15 (indiscernible). Now it's only about only three feet thick in
16 the middle of winter. People don't see this yet we do -- we
17 live it. People say no scientists -- say it's not happening --
18 they believe that. Yet they don't come up here. We live it
19 every day. All the while it's affecting us each and every year.
20 Just (indiscernible). I pray that we're able to stop the
21 (indiscernible). I hope someday we can get our lifestyle back -
22 - get those 15 to 20 feet of ice back out there in the ocean.
23 Spring time I'm afraid to out there anymore. Hunt for
24 seals -- hunt for ducks -- hunt (indiscernible). I don't know
25 if I'm going to go through the ice yet in those (indiscernible)

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1 what you look for out there. The thickness of the ice -- the
2 color of the ice -- the conditions of the ice. All passed on by
3 traditional knowledge. Thank you for listening to me and I hope
4 something good comes out of this. Thank you.
5 MS. ANNISKETT: Willard is our Reverend at the Episcopal
6 Church.
7 REX HENSON: Just wanted to make an observation with the
8 comments. I'm Rex Henson and I've just been around for about a
9 year here working in the community. What happens here affects
10 the whole world.
11 Shell this summer was her with meetings and in one meeting
12 that I took part of they said that through the new technologies
13 and safeguards that they've developed and plans to institute
14 since the Gulf oil spill which was still going on when they put
15 the -- as the meetings changes -- said that a large oil spill
16 would not happen up here. They might have been able to
17 (indiscernible) small oil spills and (indiscernible) back to
18 destroy the subsistence way of life on (indiscernible) slowly
19 leaching into the food chain (indiscernible) giant spill.
20 But they're claiming the technology and the safeguards
21 that are in place would prevent something like that happening
22 today. Valdez is 20-30 something years ago now that was the
23 worse (indiscernible) disaster history at that time. So 20
24 years have gone by and then this year now we have the Gulf
25 spill. Worst environmental history of damage in the history of

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1 the United States. 20 years later -- 20 years more technology -
2 - 20 years not only that but right here on the North Slope on
3 the pipeline we had the worst or second or third worst spill in
4 the history of the pipeline. On the pipeline we had a worst
5 spill at one of the pump stations that you know. So these
6 things to be inevitable but they will happen whether it be on a
7 large scale or a small scale so it's hard for environmental
8 impact it's just what type of impact are people willing to
9 accept because it will be a large impact. Overall I mean
10 (indiscernible) it's going to happen -- there's no doubt about
11 it -- no way it'll stop this from happening everywhere that this
12 has ever been done -- that you had this (indiscernible).
13 I use a analogy talking about a friend of mine -- he says
14 well you know it's like -- I'm a cook so you got two
15 (indiscernible) cheeseburgers and you pour a quart of oil over
16 one of the cheeseburgers (indiscernible) obviously. All right
17 if I pour just a quarter teaspoon on your cheeseburger will you
18 eat that? No. Half a teaspoon -- you know what's the limit?
19 You know the damage will be done and their food as I use a
20 cheeseburger for an example like the whales -- will be affected
21 and it will be so important. But our (indiscernible) little by
22 little from the pollution from the entire world --
23 (indiscernible) how the industrial development from oil
24 companies (indiscernible) of the world but it's already affected
25 the local area from the impact of the entire world let alone

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1 this happening right here in our backyard.
2 They sat it's not a matter of if it will happen -- it will
3 happen just whether the people of this area you know will accept
4 it. And that's it. Thank you.
5 MR. REXFORD: Spell your last name.
6 MR. HENSON: Henson -- H-E-N-S-O-N. I do admire and
7 respect the people of this village and throughout Alaska. I'm
8 not from her but I respect their (indiscernible) and concerns.
9 UNIDENTIFIED FEMALE: Having three boys ages under 10 --
10 they know about the traditional knowledge. They tell me even
11 though they probably never even caught a summer bird or a
12 squirrel yet but they did tell me -- mom I caught you a caribou
13 -- mom I caught you a polar bear. They know about the
14 traditional knowledge and I don't want that to be taken away
15 from them.
16 MR. TRACEY: I'm not going to repeat everything that's
17 been said tonight even though I know where it's coming from -- I
18 feel it -- I've been living it for the last 38 years. Really
19 close knit community here -- everybody depends on everybody else
20 here. We talk about patience -- let me just mention that a
21 little bit. I've learned patience here which take a lifetime to
22 learn and practice that patience.
23 And I appreciate you folks sitting here and listening to
24 us tonight that reflect on what you see and (indiscernible) or
25 talk shows or debates on TV. And nobody ever gets to finish a

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1 statement. Someone's always cutting in and it becomes a I
2 commit. Nothing ever really gets said and then it's over.
3 It's different -- this happens here your timing is perfect
4 for us expressing our points of view and I really appreciate
5 that. And as Lily mentioned there's a whole group of values
6 that are lived by and practiced here every day. And as a group
7 can record all those values and insert those values into IEIS if
8 you will. And it may work a little better.
9 We're talking about team work -- if we could all work
10 together we might come up with a plan that will work. Happiness
11 -- caring -- all these different values should be incorporated
12 and I think and we should work on that. We talked a little bit
13 about scientific uncertainties and possibly some of them have
14 been overcome like the bowhead whales. Not so fast the world's
15 changing and we're witnessing it here on a fast track.
16 Willard mentioned the ice disappearing or getting thinner
17 -- it won't be long before -- you know might not be any ice at
18 all or what? Or is it going to get cold again. The world has
19 been going through phases and cycles for billions of years --
20 we're just a rock hurtling through space for billions of years.
21 Nothing is really certain -- we don't know what tomorrow is. We
22 don't know what's going to happen on December 21, 2012 either do
23 we. I want to talk about that.
24 With the walrus -- the last four years -- the walruses
25 have used the shores of the Chukchi Sea for refuge because there

1 was no ice for them to rest on -- for them to leave their
2 juveniles so they can off and forage food and bring it back so
3 they know where their juvenile is. If you leave your kids in
4 the ocean they're going to drift with the currents -- the
5 mother's not going to know where to come back to feed their
6 young so they're using our beaches.
7 The first year it was several miles north of us. We had
8 little to no really control over the situation. They year was a
9 little bit different. We came up with an official statement for
10 the world -- we live in it -- anybody making their way over
11 there we read them the riot act and the federal laws and the
12 state laws about going over there and disturbing them and that
13 seemed to work. We diverted aircraft so the aircraft wouldn't
14 fly right over them and disturb and cause a stampede. And like
15 we saw a couple of years ago where hundreds of juveniles and
16 female walruses were killed just from being crushed during
17 stampedes. That didn't happen this year because we had a little
18 bit of control -- we had a little bit of knowledge of what
19 they're doing -- why they're here and what they need to sustain
20 themselves and then move on.
21 So they had a good year here and the walruses moved --
22 they're probably several hundred miles offshore now on some of
23 the ice on Russian shores and down by the Nome areas. At least
24 they had the opportunity to move on (indiscernible) go down
25 there. So we've learned that and we learned it through some

1 mistakes because when they were stampeded a couple of years ago
2 it was really ugly. And we believe that stampede was caused by
3 polar bear activity. So not much we can do about that but there
4 was something we can do about our involvement with them.
5 Another unique thing about Point Lay is that -- Willard
6 talked about Nuiqsut. Nuiqsut -- half the village -- the native
7 village are kind of anti-industry but the corporation is pro-
8 industry and they've embraced -- they're making money with it
9 and so got kind of a battle there in a single community. But
10 here the native village and Cully Corporation seem to be working
11 together really well. You know Wainwright is starting -- the
12 Wainwright Corporation is starting industry and what I have to
13 think is that off shore drilling is probably going to happen
14 regardless of any opposition up here but let it happen on our
15 terms.
16 And I think that's how some of these village corporations
17 are looking at it. It's going to happen -- we're going to
18 profit from it but it's also going to happen on our terms. And
19 we're starting to hear some of our terms now and then this was
20 here before and we spoke. And I haven't myself read the whole
21 EIS -- boy I'm going to read more and more of these
22 (indiscernible).
23 We've had studies here and we've had studies with
24 helicopters and I don't believe the helicopter is through
25 studying caribou what do you get. You get a bunch of nervous

1 caribou -- you're not getting the real animal -- you're not
2 getting the real behavior. We've had non-invasive studies --
3 we've had UAF was up here Marie mentioned for three years in a
4 row studying Moose. Those folks were on foot -- they were in
5 (indiscernible) -- they studied the (indiscernible) -- the bird
6 was not nervous -- the bird was allowed to do it's every day
7 thing -- it was a beautiful study and I think that's what we
8 need to see more of.
9 We've got to stop using helicopters for everything. If
10 you want to study something that's distant go out there and
11 spend time out there -- don't go back and forth every day back
12 to your camp and then come back out. We saw caribou -- we
13 didn't have an honest caribou study here because the helicopter
14 would bring the folks and back and forth every day. We've had
15 fish studies and those are non-invasive -- go out in your boat
16 and net a bunch of fish and we get you know a true story there.
17 We've had local involvement with studies. If we went out
18 on a caribou hunt or a whale hunt or just out for a joyride --
19 we would come back and fill out a survey. And all that
20 information was pulled together and plugged in and no
21 helicopters. It was a really good study and the folks here
22 either made a little gas from it or a little bit of money. So
23 it worked out real nice.
24 You mentioned currents and yeah currents are being
25 studied. They've been studied for a couple of years in

1 Wainwright now and this year in Point Lay they just set up a
2 couple of antennas and they had the buoy going back and forth
3 out in our ocean and I'd seen some live up to date of pictures
4 of currents. Off shore Point Lay and it shows some things we've
5 learned from charts but the charts weren't complete but they're
6 shoals out there that kind of influence the currents. And
7 between the winds -- the shoals and the currents going by it
8 looks like if oil was spilled out here it's going to be a mess.
9 It's going to go out in multiple directions and also what I
10 learned from the currents is why and where the belugas are going
11 out there where the walrus are going out there because when
12 you're boating out there and all of a sudden come across a
13 current -- there's birds -- there's fish to seals -- there's the
14 (indiscernible). They're all there with these currents and
15 that's where our food is -- that's where the oil is going to be.
16 It would be a disaster.

17 So I mentioned that life begins here -- this is the top of
18 the world. We've got the polar bear here which is the top of
19 the food chain if you will. That's one piece where an animal is
20 -- and man is lesser than that animal there. A lot of respect
21 for every animal here and that's another one of the virtues that
22 attracts us up here. Even though you're hunting that animal and
23 living off that animal you're respecting that animal. I've
24 watched year after year after year and I've learned to do it
25 myself when belugas are hunted. The head is severed to release

1 the spirit so that the hunt will be good this year. Just shows
2 you the love for that animal and respect for that animal.

3 We've mentioned cumulative effects -- and that's not just
4 off shore affects. You've got to include everything. You've
5 got to include all your activity on land -- you've got the food
6 and environmental activities. Everything's got to be included
7 you can't just go like (indiscernible) with Prudhoe Bay -- the
8 accumulative effects of what's happening in that specific area.
9 But the same time there're studying this area now. We've had
10 cold studies -- we got Red Dog -- we got to pool all this
11 together and then of course what we're doing up here -- there's
12 more people living out (indiscernible) ever before. We're
13 really watching how many caribou are taken -- we need to
14 maintain that herd -- how many walrus are taken -- how many
15 whales are taken -- you have to. We're kind of self
16 (indiscernible) on our belugas right now. The weapon
17 (indiscernible) -- those belugas come back in numbers every year
18 because we're not wasting -- we're not over killing and that's
19 something that needs to be practiced everywhere. And in every
20 aspect.

21 Industry if there's enough oil on shore right now by golly
22 let's get the oil that's on shore and let's do it smart. Let's
23 let technology catch up with off shore stuff. Everybody's
24 talked about skills -- I'm not going to repeat it but we're not
25 ready for off shore. We proved it ourselves that we learn from

1 the states but it's too late if you make a mistake. We're 250
2 people here at best -- tonight we'll be a few more with you
3 folks here.

4 Sometimes we feel like it's 250 people versus everybody in
5 the lower 48. We don't have a loud voice but look at us as you
6 would say New York. New York is a community -- sure there's a
7 lot more people but it's a thriving community and they do things
8 their way and if they were asked to change by golly there's
9 going to be a lot of commotion. There's 250 people here that
10 makes this community -- that should be important. If you put
11 all of the people together that live on the slope and use the
12 slope and need the slope -- we don't equal the amount of people
13 you're going to find in a mall -- Merry Christmas -- a ninth --
14 a fraction of that many people. You got to respect the fact
15 that these are communities -- they're not big but they're
16 communities and they've been here longer than any community down
17 in the lower 48.

18 DOD has been up here. They made promises -- they set up
19 (indiscernible) lines (indiscernible). They had a treaty with
20 Point Lay -- the native village of Point Lay and when they were
21 done with that Air Force sight it would be given back to the
22 native village community. We're still waiting for that to happen
23 but since then that treaty's been kind of overwritten and now
24 instead of the Air Force land going back to the rightful owners
25 -- going back to a corporation that was with ANSCA. So ANSCA

1 deals with the state entities -- the native villages' boroughs -
2 - so when the Air Force is done with that property it goes to
3 BLM and BLM turns it over to Cully Corporation -- a state
4 entity.

5 Cully Corporation wasn't here in the 50s when the Air
6 Force made a deal with the native village of Point Lay. And I
7 think the point that I'm trying to make is that things are
8 forgotten -- things have changed -- promises are broken and
9 we've seen that throughout the history of the United States of
10 America. And it's still happening. We can't fool ourselves in
11 thinking it's not -- it's still happening. Changes are made and
12 not everybody is in agreement or even aware of the changes. I'm
13 not going to stop there because in our defense they polluted
14 these areas and yeah there's some cleanup going on now --
15 there's Operation Clean Sweep and other monies that are here. I
16 tell you though at one point when the war was at its peak over
17 in Iraq those (indiscernible).

18 There's still some monies to clean up these sights but if
19 you look where they are most of them are coastal if not all of
20 them.

21 On some form of water way and there dumps include pcb's
22 and other carcinogens that are affecting animals. And it's the
23 animals that we eat. An awful lot of cancer up here and there's
24 even atomic waster up here. Folks that got written about -- it
25 just goes on and on -- the pollutants are already here plus what

1 Rex mentioned the pollutants from the world come (indiscernible)
2 here. If you look at the way the magnetic spheres around the
3 earth it follows here at the top of the world and it funnels
4 into the bottom of the world. We're getting pollutants from all
5 of the world right here -- even space pollutants.

6 So it's not the clean pristine place that some people like
7 to think it is. Where it's a daily battle to try to maintain
8 with all this outside interference. We're talking about
9 billions of dollars of infrastructure the offshore goes into
10 effect. Does any of that take into consideration that people in
11 Point Lay -- Wainwright -- Point Hope -- Alaska are buying their
12 fuels from Seattle. The oil is coming from here and the natural
13 gas is going to be coming from here -- do we get to enjoy some
14 of that profit or are we still going to have to buy it? We're
15 at the mercy of the barge -- if the barge can't get in then we
16 have to fly our fuel in and the price elevates. It's already
17 ridiculous anyway for what it costs for a gallon of oil so that
18 might be something that we would bargain for. If it's going to
19 happen -- if off shore drilling is going to happen -- include
20 everything we're saying tonight and help us out with a small
21 piece of that gas pipeline.

22 And that was going to be my final statement is that if off
23 shore activities are in fact going to happen it looks like
24 they're going to happen all over the world -- the whole world
25 right now to us is the Arctic ocean. We've got Russian interest

1 out there -- we've got Canadian interest out there and USA of
2 course. We need to work together as a world and pool our
3 ingenuities and our technologies and do it right. Let's not
4 fight over all this -- let's do it right.

5 MS. ANNISKETT: Thank you Bill.

6 MR. TRACEY: Thank you.

7 MR. LOMAN: Thank you very much. We've been on the record
8 for well over two hours and I can move around better than the
9 court reporter can so I'm going to go on a five minute break
10 because I know we have a lot more testimony that people want to
11 give and we want to hear it. So five minute break and then
12 we'll take our seats and talk about this. Continue on.

13 (off the record: 9:50 p.m.)

14 The reporter said: 9:50 p.m.

15 (on the record 10:10 p.m.)

16 LEO FERREIRA, JR: What you hear (indiscernible) the
17 majority of the folks being in this village (indiscernible)
18 because we all say a part and we all have a part to say. Even
19 though there's different stories like it's suppose to be. Our
20 way of lifestyle are traditional -- Inupiat cultural
21 (indiscernible). For hundreds and thousands of years from
22 generations to generations taught to us through particular
23 cultural and dancing. A bit part of it is (indiscernible)
24 communities in our State of Alaska. We have to as natives we're
25 trying to learn how to balance out with western world past

1 (indiscernible) industrials. We feel like as natives up here we
2 feel like we're being held (indiscernible) pagan -- we're
3 depressed. Its decision makings are going on just a little too
4 fast and it's not -- we see it doesn't have a good decision and
5 these are people that are whether it's the federal government or
6 gas and oil industry. We feel that we're being pressured just a
7 little too fast and at the same time we have to think about our
8 cultural and our way of life. And we (indiscernible) no zero
9 tolerance of our Inupiat native way of life being affected
10 whatsoever by gas and oil period.

11 And yet we have to balance out to make some kind of
12 stipulations to what we have some kind of control over the gas
13 and oil activity up here. We have to have some kind of control
14 so we have a sense and a meaning -- and in fact that our
15 traditional life will not be affected in any way or form.
16 That's how we have it and that's how we -- all of us been taught
17 throughout the years from our grandparents -- our parents to us
18 and even -- everything has to be taken into effect either from
19 this community or the next community.

20 Every community is special in its own way. There's
21 different kind of things -- maybe one community has all whales
22 and others maybe they hunt more birds than others or they have
23 more seal hunters or how they be communities up here. Those are
24 my relations -- they need to be better -- they need to be paid
25 better to where it fits our lifestyles. It doesn't

1 (indiscernible) to take them away from us at all. And you hear
2 -- some people will say we don't know gas and oil -- some people
3 will say we got no choice -- some other people say it's going to
4 happen either way but we still have to balance out because we're
5 Alaska natives and the United States government -- we're
6 brothers-in-arms and we see that and so we have to balance out
7 but yet we have to protect our way of life period.

8 So you might (indiscernible) as a ways to be here through
9 the whole native community through the whole State of Alaska and
10 our coastal villages that we (indiscernible) harm to happen to
11 our ocean -- we already know our subsistence life when we take
12 (indiscernible) and that's our strongest hold we had -- is our
13 subsistence way of life. And you take that away from us -- it
14 will be taken away from us if we have an oil spill and the
15 magnitude is too great for us and scientist already tell us that
16 we can't clean up an oil spill and that's scary when you tell
17 and receive it and we hear stories about it.

18 Even people in our ICAS have to look (indiscernible)
19 documentation on it -- oil clean up here is method. What we
20 find is just a little bit and then there are small portions of a
21 real small oil spill but it's not you know things that are oil
22 spill.... If it's a big catastrophe like Hurricane Katrina in
23 the Gulf of Mexico during over there and look at that oil spill
24 and (indiscernible) happening up here. We don't see how could
25 the government say let's go open up oil without doing studies

1 and there's rules and regulations from (indiscernible). There
2 has to be some kind of (indiscernible) here. So our balance is
3 we feel like all the coastal villages -- our ambassadors -- our
4 animals -- every village (indiscernible) or supplement their
5 village with their animals and their subsistence way of life.

6 Every village in that manner is unique -- their cultural.
7 We all share the ocean and the land -- we're all the same
8 people. I'm sure and I'm not sure I know how the villages feel
9 the same way we do. Too many stories from the oil companies
10 promising -- they won't be (indiscernible).

11 MR. REXFORD: We see their catastrophes -- they had
12 (indiscernible) mess. (Indiscernible).

13 MR. FERREIRA: Going to our waters and Canada and the
14 United States and by promising you guys can clean it up. I
15 don't appreciate you clean it up -- we can't even fish there.
16 The oil leaves a type of covering in the Gulf of Mexico and
17 that's why a (indiscernible) despite (indiscernible) water.
18 They still have to send divers down there to fix it.
19 (Indiscernible). It's a different process where they say
20 they're going to use (indiscernible). (Indiscernible). Water
21 (indiscernible). Still when we think about oil spills and
22 (indiscernible) know and see what that (indiscernible).
23 Industrial can't even clean up oil spill. It seems to me like
24 there needs to be more study on our wildlife and the ocean and
25 needs to taken into account.

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1 We have a community that thinks if we have an oil spill
2 that's going to kill our (indiscernible) -- our (indiscernible)
3 -- kill our whales (indiscernible) food chain. And
4 (indiscernible) our fish -- elk -- our seals -- our walrus --
5 our whole (indiscernible) going to get contaminated. And I
6 don't think anywhere in the world that the oil has been cleaned
7 up 100 percent. I don't think the disasters that happened were
8 the environmental (indiscernible) turn back to its normal
9 operation to the way it used to be before an oil spill. And
10 Exxon Valdez is a perfect example of the oil spill. I'm not
11 coming back that the environment restoring itself back to our
12 (indiscernible). Those people I feel -- I hurt for those people
13 even though when that spill happened I was a teenager and I
14 didn't understand the magnitude of an oil thing. How much the
15 oil runs the world -- at my age now and then I fully -- wouldn't
16 why I understand how oil affects the world -- how much it is a
17 part of our world. It has to be the United States but we still
18 have to protect our way of life period.

19 And we need to have some kind of word in some kind of city
20 -- some kind of law for us to govern our wildlife and govern oil
21 industrial and heed to their promises. They're not just
22 verbally promise but have it on black and white on paper
23 promises that in case of an oil spill (indiscernible). Take
24 full responsibility instead of pushing blame onto your
25 contractors. That's not right either to (indiscernible) our

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1 (indiscernible) contractor that's working for the oil company.
2 Everybody should take the blame -- part of that (indiscernible)
3 to be done -- part of the industrial around them. Doesn't
4 matter if we -- shame on ourselves for letting this happen in
5 our own country. We've been told we have and been told that our
6 oil reserve -- that we have enough oil reserve in this country
7 to sustain us for another 200 hundred years and yet matter of
8 fact the government won't help us -- natives (indiscernible).

9 We feel like one (indiscernible) to take away our cultural
10 and given up on our cultural and our subsistence way of life --
11 our oil. We don't want to do that we want to hold onto to our
12 subsistence way of life and our cultural. And yet at the same
13 time US government tells us if you don't work with us then we're
14 going to (indiscernible). It didn't work and you have no say
15 so. You have to learn on the side of the (indiscernible) here.
16 Especially with our subsistence -- it means a lot to us -- the
17 State of Alaska -- our coastal communities. Thank you.

18 MS. ANNISKETT: And another thing we haven't tested is the
19 ice cellars. The ice cellars down there in the spits they're
20 all bloodied up so we can't use them any more so our whalers
21 have made their own ice cellars by their (indiscernible). We
22 had these ice cellars for tons of years and hundreds of years
23 and they got damaged due to the permafrost and bloodied so I
24 wish there's a way you can fix them. I don't know if we even
25 can but that would be a nice thing if we tried. Thank you.

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1 MR. LOMAN: Thank you. And Mr. (indiscernible). I didn't
2 mention to you about the reorganization of what was called
3 Minerals Management Service. After the Deepwater Horizon spill
4 the President spoke to the country and the President said
5 basically that this agency known as MMS discharged its
6 regulatory authority with the state and we're showered by gifts
7 from oil executives and so they made the decision to reorganize
8 MMS. And what they have done so far is take one entity -- the
9 acronym is honored but these are the people that deal with
10 royalties and the money and they're reporting under another
11 assistant secretary now and everybody knows about some of their
12 issues long done by with the rest of us in MMS Alaska Bureau of
13 Ocean Energy Management Regulation and Enforcement. The plan is
14 not for long -- not for long -- because the vision for the
15 Secretary of the Interior is to very soon to create a Bureau of
16 Safety and Environmental Enforcement and they've got some point
17 people they've sent in from Washington D.C. but we really live
18 in Alaska here.

19 But these people and some are from -- just happen to be
20 from Alaska -- one of the gentleman that's a point person
21 working on this reorganization and a consultant firm called
22 McKenzie and we met with them. And so they said to us this new
23 agency -- this Bureau of Safety and Environmental Enforcement
24 will be the arm that regulates the industry and we want that new
25 organization -- we want to restore the public's trust in that

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1 new organization and that's our goal -- restore public trust.
2 And we said that we think that you have to put together that
3 regulatory agency that will be both feared and respected by the
4 industry. Feared and respected and I don't mean feared in the
5 usual way. I mean these two words in my mind come together --
6 fear and respect. It can come together.

7 When I was in the Navy I feared and respected the
8 regulatory authority in diving and special warfare -- explosive
9 (indiscernible) disposal. Procedures and methods and the
10 equipment and the people and we were inspected on a routine
11 basis at a very high level and we maintained a very high level
12 of readiness and safety. If we didn't I wouldn't be here today.
13 But if you had an accident in any of these areas in the military
14 and people were killed or injured they would hand pick from the
15 Safety Center and send in the best in the world on those
16 particular things. Deep diving -- the best deep divers. If it
17 was explosives and diving so on and so forth.

18 And no matter how high your state of readiness was -- how
19 good your people were -- they came in with the experience and
20 knowledge and the expertise to basically end it for you. You
21 were going to survive that kind of rigorous analysis and so this
22 new agency that the President and the Secretary wants to develop
23 to restore public trust. What would it contain -- I said well
24 now our inspectors focus on drilling operations and we think it
25 should contain much more. It should contain all encompassing

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1 worker safety -- environmental compliance -- all aspects of the
2 federal environmental regulatory framework.

3 Now you mentioned earlier that we as a government agency -
4 - a regulatory agency -- need to take into account the
5 protection of everything that's important to you -- the Inupiat
6 and the community -- the subsistence activity -- the cultural
7 redefining aspects of subsistence activity and so forth. So I
8 think now I forgot about something but that's okay because
9 they're still learning on reorganizing but maybe we can work
10 together to communicate the importance of including in this new
11 regulatory agency an element -- a person who might be whaling
12 captain -- might have been a MMO -- maybe an expert on the
13 cultural aspects of subsistence activities and other culturally
14 self defining activities.

15 And the heart of that regulatory team and make it even
16 more encompassing in the Gulf of Mexico -- wouldn't make any
17 sense but the Arctic it's certainly starting to think in my mind
18 to make sense. And so I would ask that you now continue to
19 think about your statement that the regulatory agency needs to
20 protect these activities and consider and think about what you
21 would recommend to us and you can do it me if you want and I'll
22 forward it to these people who ultimately will make the
23 recommendation to the Secretary of the Interior will make the
24 recommendation to the President on what this new regulatory
25 agency will look like.

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1 So I think we can agree that maybe that new regulatory arm
2 needs to contain that kind of expertise in the Arctic to protect
3 and the regulations are there under Marine Mammal Protection
4 Act. These activities cannot interfere with the subsistence
5 whaling. That's in the MMNPA -- that's part of National
6 Fisheries Services' discharge to ensure with their permitting
7 authority (indiscernible). But I'm glad you mentioned it
8 because I think with your help we can make a recommendation to
9 fully encompass in full measure the kind of regulatory agency
10 that would exist in Alaska to oversee industrial activities in
11 the OCS. Thank you very much. And I hope we can talk more
12 about that and not just with you Mr. President but with the rest
13 of the folks in the community because I know you will consult
14 with them too.

15 MS. TRACEY: You know what as subsistence hunters we are
16 now being forced to buy licenses to go hunting. We search
17 animals and.

18 MR. REXFORD: Jeffery right? And we have quarterly
19 meetings with Alaska's Eskimo Whaling Commission and time and
20 time we always ask the industry to bring your MMO's and give us
21 a recording. And they're all set to bring their MMO's -- any of
22 our (indiscernible) and they are not bringing the MMO's of
23 northern mammal observers -- they're not letting come for our
24 meetings when we ask them time and time again. Can these MMO's
25 do a report at an annual meeting like this one well have to our

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1 next one will be in February for the Alaska Eskimo Whaling
2 Commission and we want to hear what the Marine Mammal Observers
3 have seen under ships and we've never heard any report. The
4 scientists made the reports for them but the people that are out
5 observing the animals are they allowed making reports? Are they
6 manipulating the reports? We don't know.

7 When it's dark at night along the ocean we can't see
8 nothing when they're at with a ship.

9 MR. LOMAN: Well I certainly would join you in supporting
10 the recommendation to the National Fisheries Service to make
11 that part of the agenda for the open water meeting. You need
12 those reports -- they have scientific nexus in my mind and
13 that's what that's about is they're required under the Marine
14 Mammal Protection Act to appear be of science. I mean it's a
15 regulatory thing but their observations are a part of science.
16 So I think it's important to ask them to put that on the agenda
17 and get those reports and review them and discuss them during
18 the open water meeting.

19 MR. REXFORD: I mean after the end of their season you
20 know at least have (indiscernible) their MMO's (indiscernible)
21 and that all these other commissions look up to Alaska Eskimo
22 Whaling Commission. When they have issues with the oil
23 industries like Willie the CAA under the beluga that's a whole
24 community at the high school or the school that first see the
25 (indiscernible) we had. I was President for the native village

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1 of Point Lay at the time and I signed off on it and we had set
2 July 20 date.
3 All it was was a date that we signed off on -- that was
4 it. No to interfere with our beluga hunt. There was a one page
5 CAA and then we came on board to AWC in 2008 of February or was
6 it (indiscernible). And we came a long way (indiscernible) a
7 mad rush to we have no ice. We came home -- built our ice
8 cellars but we finished them in time before the hunt -- bowhead
9 whale hunt. And we didn't succeed the first year but the second
10 year we did succeed in that being a whale. You can see the
11 pictures up here and the celebration in June. On the Thursday I
12 caught -- we caught a whale -- the whole community. We came
13 together and cut it up and it took us some time to cut it up but
14 we did it.
15 I've done it time and time again. In Barrow I started out
16 (indiscernible) you know manning the hose to help them pull the
17 skin off the whale -- carve the meat and then I graduated to
18 butchering whales and that's how I learned how to know where the
19 (indiscernible) are is (indiscernible). Portraying the whale
20 and you look for the (indiscernible) where the kill spots are.
21 It took me about 15 years to become a harpoon from the start --
22 I mean you just can't go in there and say hey I'm a harpooner --
23 can you put me on a harpoon boat. That's not the way it goes --
24 you got to -- like in the military you've got to start from the
25 bottom and go up -- ranking. And that's all I have.

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1 MS. ANNISKETT: That same thing goes for beluga -- we
2 would all (indiscernible) get the harvest but we keep going out
3 with the weather conditions and the captain and the people --
4 it's not always successful but we try our best.
5 MR. NEAKOK: You know we have commissions for the people
6 here in our village -- our commissioners that attend AWC. We
7 have people attending beluga -- we have people attending walrus
8 commission meeting -- polar bear -- you know seals. And you
9 know we report to them but we -- what we do in our village you
10 know. It's our responsibility to give rather than to take. You
11 know that way we can regulate our intake of what we subsist on.
12 And they report to us you know who puts portion of Alaska being
13 affected by certain things. You know and we pass it on to our
14 village council meetings. You know we don't -- especially for
15 our belugas you know we have beluga commission that reports to
16 the commission that -- you know does state or federal reports
17 you know how our population is whether they're down in port of
18 Anchorage or Kotzebue. The stock that we subsist off of here
19 you know like we said before we don't like to waste anything
20 especially our belugas and the walrus.
21 You know we heard testimony about us not you know going
22 mad dash going full bore (indiscernible) walrus. We care for
23 the animals that we subsist off of. We (indiscernible). The
24 (indiscernible) population wise and we you know have to report
25 to them whether we might see you know certain things what kind

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1 of caribou -- we see certain things you know out of the
2 ordinary. We might see a cyst or a boil or something that we
3 know that's not suppose to be there and we report it.
4 We have scientist coming down from Barrow even way over to
5 Connecticut that comes every end of June to take samples --
6 tissue samples -- bird samples that they take back and report to
7 us you know how our stock is. Butchering after we've done
8 butchering you know we allow them to take samples. You know we
9 communicate with them -- they communicate with us. We help them
10 you know take belugas and we help you know take some of the
11 tissue samples that we have from us. You know after our hunts
12 and it works both ways when we cooperate.
13 And you know that's what we -- you know like I said every
14 year we have commissioners on different wildlife here. And
15 might be able to get some information from those commissions to
16 hopefully get -- you know regulate more and/or stop any you know
17 oil drilling out there in the Chukchi and Beaufort sea. Because
18 each of our (indiscernible) have commissioners that attend these
19 meetings. You know that might be a helpful thing to maybe
20 attend to where you know we can learn something you know
21 provided that (indiscernible). I don't know if they will or not
22 but you know no harm in asking. Probably an open public meeting
23 anyway.
24 You know we go there you know certain months of the year
25 to give our report. As for myself I have to go to Anchorage

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1 next month and do a report on the walrus (indiscernible) that we
2 have had here. How many animals that we're you know crushed
3 during or stampede. You know I have to give a full report --
4 I've even helped the State of Alaska to -- you know go out there
5 and take measurements of the walrus that were stampeded dead on
6 the beach. After see you know the size and general condition of
7 the walrus and I have to give that (indiscernible) in which you
8 know the state that turns around and gives a report to our
9 village on how you know and why it happened. You know even
10 (indiscernible) doing this too -- he goes to his quarterly
11 meeting -- he lets us know what's going on -- how many
12 (indiscernible) we can get -- how many (indiscernible) you know
13 the AWC can get for the whole year.
14 But if that's another option and maybe we can use to
15 hopefully stop or slow down exploration -- drilling -- pipeline
16 that if we can put in the EIS that we -- use a tool. And the
17 tools that we use going to these meetings -- you know benefit us
18 -- benefit all seven villages. We let them know you know like
19 the beluga commissioner report on the belugas we got this year --
20 -- last year -- year before. And just like walrus too -- just
21 like bowhead -- migratory birds you know we (indiscernible).
22 We're deep into this like Marie said you know now we've been
23 hunting without permits or licenses for thousands of years now
24 people are coming in and saying you need a license to hunt this.
25 We've never had that before.

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1 MS. ANNISKETT: Treat us like criminals.
2 MR. NEAKOK: You know we've been doing this for thousands
3 of years and we only taken what we eat to sustain us during that
4 time. And now they want to regulate our intake of certain foods
5 and that's why we need people. That's why we have commissions
6 that (indiscernible) -- (indiscernible) sustain the population
7 of whatever marine mammal -- land or air -- the birds that we
8 harvest. You know those protection (indiscernible). Get a
9 license from the Fish and Game Department just to hunt ducks.
10 You know we need to do that (indiscernible). Pretty soon they
11 might come under and we're going to have buy you know trailer
12 boat permits. (Indiscernible) in Minilchik you know. You know
13 permits -- lotteries -- thank you. You know we don't need that.
14 We take what we need -- we eat what we eat -- we don't
15 waste anything. And I hope you know that hopefully we can you
16 know use these commissions to help our fight against you know
17 drilling -- purposed to be happening here in the Chukchi and the
18 Beaufort sea. Thank you.
19 MR. TRACEY: We take pride in the fact that most of the
20 knowledge gained -- face that knowledge gained about belugas is
21 common here. And we've invited the scientists to work with us
22 during the hunt and after the hunt and during the butchering.
23 Like they always take their samples but here in (indiscernible)
24 belugas prior to us inviting the scientific world here and I
25 thought that was pretty neat.

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1 On the theme of commissions earlier I mentioned cumulative
2 affects shouldn't be all inclusive. Sure we're talking about
3 off shore drilling but all the other activities need to be
4 considered. I sit on the Planning Commission -- Willard is the
5 alternate and (indiscernible) this year but regardless 99
6 percent of the permits that are being applied for are -- I
7 almost want to say after thoughts. The original permit you know
8 brought industry in and they did their drilling -- okay they got
9 their role established. Then their permit for a pipeline and
10 permit for a road and permit for an ice road then a permit for a
11 pad. I think we need to include a 20 year projection of what
12 off shore we can expect from off shore (indiscernible).
13 If we knew that it'd be easier today to decide you know
14 how to go about some of these points that they have. I'm sure a
15 company that's spending billions of dollars pretty much knows
16 what's going to happen in the next five -- 15 -- 20 years.
17 They've got to know otherwise they wouldn't be doing business so
18 I would think it would be relatively easy to include a future
19 projection in what industry's activities are going to be let's
20 say applied for drilling activities. Thank you.
21 MR. LOMAN: I'm not so sure that they know for sure what's
22 going to happen but you'd think that we in considering
23 accumulative affects. Part of that effort is to develop detail
24 in so much as you can a reasonable scenario for development
25 (indiscernible) colleagues do that. There's models in Arctic

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1 waters or near Arctic waters -- a few anyway to look at.
2 (Indiscernible) concepts that are in place there. What's a
3 project that is no good (indiscernible)? If it was a sampling
4 of a heavily subsidized project that reduces the footprint and
5 popular -- there are not ways that you can get those who have
6 many of the typical concerns of off shore oil and gas and the
7 impacts.
8 But you know there's I think -- industry has an obligation
9 certainly when going into produce and development to do that.
10 At this point in time we're (indiscernible) down. We've got
11 companies with billions of dollars of leases they don't exactly
12 where the oil is whether or not it is really there. It's only
13 through exploration that they really know.
14 And as we've seen over the recent years -- four years now
15 -- in efforts to explore -- these huge, huge hurdles of
16 regulatory political hurdles -- economic in that hundreds of
17 millions dollars are spent and still no exploration. So if we
18 (indiscernible) forget the legal. I forget pretty easily --
19 it's just like breathing almost right. But I agree that
20 certainly it would be easier for the communities in the Arctic
21 to envision what the risk if they knew what was really going to
22 take place -- how it will in great detail hopefully that will
23 come.
24 MR. PETERSON: Mike (indiscernible) point out but we're
25 going to hear (indiscernible) envisioning what the impact of the

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1 success would have and that's what we're concerned about. It's
2 kind of worth noting that the history of Arctic off shore
3 exploration has been negative and industry deciding not to
4 proceed at this point. Not to proceed to go ahead but getting
5 close. Exploratory wells and I think (indiscernible) basing and
6 some (indiscernible) basin.
7 The drilling there is very disappointing and industries
8 have essentially abandoned areas and you know they're
9 (indiscernible) no more anticipated activity in those areas so
10 we're concerned with successes in exploration and the impacts
11 they may have. History so far off shore is said to be produce
12 (indiscernible) exploratory drilling. Sort of condemn the areas
13 and ended to keep track (indiscernible).
14 Now I mean minimize what you know could happen but it's
15 worth keeping in mind that may be the end result that
16 exploratory drilling is bad news everybody packs up and goes
17 home and then look somewhere else.
18 MR. LOMAN: It's almost unfathomable for people in the
19 communities like some here that have been attending these
20 meetings for almost 30 years and maybe 30 years now concerned
21 about off shore oil and gas development in the Arctic. I can
22 imagine that that would be a possibility that they could drill a
23 couple dozen more exploration wells in addition to the ones that
24 have already been drilled and have no further interests and walk
25 away from the Arctic with nothing in the OCS. It's possible.

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1 And hard to believe for us that are in this everyday but it is
2 possible.

3 MR. REXFORD: One comment that was made at our third
4 quarterly meetings and this is just the beginning. Wait till
5 they find the oil. I mean you're going to have hundreds of
6 ships coming into the Arctic. After the whales is found then
7 the (indiscernible). I mean the Murray Pilots Association came
8 to one of our meetings and said -- hey (indiscernible). Every
9 owner of a tug -- barge -- we want to give a contract to
10 (indiscernible) and bring it in and we're dead in the water
11 there's no one to help us.

12 I mean is ever been a moratorium on barges coming into our
13 waters. I mean revelations and this (indiscernible) sea were
14 what these Murray Pilots Association was talking about and one
15 of our commissioners said gone to the (indiscernible) in Dutch
16 Harbor and now he's no longer a commissioner. We don't have
17 anyone that frequents to these meetings anymore and our children
18 from AWC mentioned that you know (indiscernible) problem. The
19 seismic and drilling is nothing compared to what's going to
20 happen -- what's going to follow after the oil is
21 (indiscernible). I (indiscernible) here.

22 Like Bill said you know it is going to go in stages. So I
23 mean it's going to go on for what 20 years maybe more. But if a
24 pipeline fails -- the well fails -- we got (indiscernible). And
25 we don't know.

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1 MS. TRACY: Certainly we found gold in areas but
2 (indiscernible) came out black (indiscernible) so
3 (indiscernible) will be coming up this way and we wouldn't be
4 able to accommodate them. (Indiscernible) their ocean it's going
5 to be -- it's going ruin ours. Or mammal life up there.

6 MR. REXFORD: Anyway I think I'm done.

7 MR. LOMAN: How many people have been to the open water?
8 I'm sorry I know you're.

9 MR. PIKOK: You know I'm not (indiscernible) for this off
10 shore drilling. I'm against it. We live off of our ocean --
11 this is our garden. You take that one animal away all that
12 animal (indiscernible) it's going to go. I mean I'm not
13 (indiscernible) on orders off shore you know. I'm against it.
14 We live off our ocean -- you take that one mammal away the rest
15 of them are going to follow it like a chain reaction. That
16 happens you know. We follow (indiscernible).

17 That's our garden out there. You know that'll hurt us.
18 We live on (indiscernible) if we have an oil spill out there.

19 MR. LOMAN: How many people have been to the open water
20 (indiscernible) that no one (indiscernible).

21 MR. TRACEY: We had a form of that (indiscernible) here.
22 Right. No one was (indiscernible).

23 MR. LOMAN: And the Coast Guard comes out here?

24 MR. TRACEY: No.

25 MR. LOMAN: I've been to three now and last year there

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1 were a number of seismic companies coming in to talk about what
2 they intended to do. And it was very interesting that one in
3 particular -- quite frankly I even remember the name of that
4 company -- but their representative was presenting what they
5 intended to do.

6 MR. REXFORD: (Indiscernible)?

7 MR. LOMAN: No. This was one of the speculators that the
8 company had actually conducts seismic but many of my colleagues
9 remember was (indiscernible). But the representative is
10 presenting information what they intend to do and how they
11 intend to do it and starts being questioned by whaling captains.
12 So our regulatory agencies and literally within an hour you
13 could see and I turned to (indiscernible) was sitting next to me
14 at the time and I said.

15 MS. ANNISKETT: He's too young to remember.

16 MR. LOMAN: I said they're not ready for prime time. And
17 it became more and more obvious and so you know people from the
18 Marine Association or can come from outside and say oh watch out
19 there's going to be a flood of activity once they do this kind
20 of or the other thing. No doing business in the Arctic is not
21 going to be some cake walk for anybody just because they find
22 oil. No it's not going to happen.

23 MS. ANNISKETT: You don't know that.

24 MR. LOMAN: That's not -- I mean if there's one thing I
25 know ma'am I do know that. Because there are a host of federal

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1 laws that they -- we'll make the difference.

2 MS. ANNISKETT: The last oil company say.

3 MR. LOMAN: I don't work for the oil company. I don't
4 work for an oil company and I never work for an oil company. I
5 owe oil companies nothing.

6 MS. ANNISKETT: You sure sound like it.

7 MR. LOMAN: And I'm not here to talk anybody into
8 anything.

9 MS. ANNISKETT: You won't (indiscernible).

10 MR. LOMAN: Yeah I don't work for oil companies.

11 MS. ANNISKETT: That's why we're fighting....

12 MR. LOMAN: I understand that -- I'm sharing with you what
13 I've seen and what I've learned in the time that I've seen it.
14 There are and I think everybody could agree that oil companies
15 (indiscernible) the Chukchi sea in 2008 and sent billions of
16 dollars and have moved to explore. Hundreds of millions of
17 dollars have been sent and have not accomplished any
18 exploration.

19 MS. ANNISKETT: And yet that's their change to them.

20 MR. LOMAN: I'm not going to discount that -- that they
21 have a lot of money (indiscernible). The alarmist things that
22 we hear and this is just my point not to talk you into not being
23 concerned. Believe me I know enough about people in the
24 communities -- everyone here included -- that that's ridiculous.
25 I'm not going to talk you into agreeing to that. But the law --

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1 the federal regulatory framework -- the agencies that are in
2 place and enforce them -- the litigation when they don't enforce
3 it appropriate is a very compelling hurt. For those kinds of
4 activities to take what in every aspect should be -- seismic --
5 drilling is all regulated. Discharges to the air -- to the
6 water -- so on and so forth.

7 And you know my only desire is that the regulatory
8 agencies get stronger not weaker. Stronger than the audience.
9 That's all I'll say. I'm sorry that anybody thinks that I work
10 for an oil company. I don't work for an oil company. I owe the
11 oil companies no more than I already (indiscernible) or anybody
12 else in America.

13 MR. REXFORD: So in light of environmental justice is
14 finally here?

15 MR. LOMAN: I hope it's here to stay. One thing I will
16 say about the administrations I've seen since I've worked for
17 the federal government whether it was Republican Administration
18 or Democratic Administration -- the political appointees that
19 I've seen and come into contact with and gotten to know a little
20 bit -- want to treat native people like a national treasure.
21 Not the poster child for the national trashcan (indiscernible).
22 They really do.

23 They really want to do it. The problem is America is a
24 huge country with a huge, huge demand for oil. There is a lot
25 of things that (indiscernible). But they -- I can see the

1 desire in these people to treat native people like a national
2 treasure. And then that's something I can (indiscernible).
3 It's certainly is better than the opposite.

4 MS. TRACEY: You know when the walrus was here we're
5 getting called the people that are (indiscernible). Or we're
6 getting rich. If we could get rich we could have tourist
7 industry. Even now then everything come and take pictures and
8 all that. If you guys could get rich -- we don't care about
9 getting rich -- we (indiscernible) how to protect our
10 subsistence way of life you know. If (indiscernible) really
11 look around this -- kids play here but you know we could use
12 some money but we don't want to trade our subsistence way of
13 life for billions like you know Nuiqsut.

14 MR. LOMAN: I don't really (indiscernible) rich doing it
15 anyway.

16 MS. TRACEY: Well no I mean you know (indiscernible) rich
17 anyway.

18 MR. TRACEY: Let's here from Robert.

19 MR. LISBOURNE: I am also against off shore drilling.
20 It's just (indiscernible) hunter -- whalers -- beluga hunters
21 and Inupiat way of life is mainly hunting and subsistence
22 (indiscernible). We just don't go out there and do it for fun
23 you know. We build in knowledge -- we build in the heart -- we
24 do it together and we share by (indiscernible). Dad caught the
25 whale (indiscernible) had the celebration. It's mainly because

1 we share. If you could see those pictures over there and see
2 how happy everybody is -- celebrating.

3 And Inupiat people who are on the slope it takes
4 (indiscernible) it takes -- you know take the whole community to
5 raise one. It's because the knowledge is all being passed on
6 and some opportunities pass on. All this subsistence we hunt
7 throughout the year plus Inupiat people are different from like
8 the people (indiscernible) in Alaska but I call Thanksgiving and
9 Christmas -- we all gather and have a big piece in all the food
10 we catch. Just all gathered up and there are people out there
11 (indiscernible) you know and just happy to see people that go
12 there and take food. That's an old fashioned (indiscernible) --
13 keep the herds in homes giving food if they're too far
14 (indiscernible) like (indiscernible) jobs you know and for our
15 native communities.

16 So I love doing what I do (indiscernible) divide and not
17 only that with the subsistence (indiscernible) we have Inupiat
18 values. And there is somewhat (indiscernible).

19 MS. TRACEY: I think if we stay any longer we're going to
20 get more cranky people. Because I think it's (indiscernible).

21 MR. LOMAN: Yeah they did lock the lodge an hour ago
22 but....

23 MS. TRACEY: Do you know how many cranky....

24 MR. LOMAN: There is a dynamic if you keep it on and then
25 you start being Inupiat crank and you fight and then you get

1 past that and then something good is suppose to happen.

2 MS. TRACEY: Good night.

3 MR. LOMAN: And we'll go off record and conclude that if
4 no one else has anything else to say. I'd just like to say
5 thank you for taking all this time to have this discussion. We
6 certainly learned a lot from everybody that said here.
7 Hopefully you've learned a little bit about what we're doing. I
8 know it's (indiscernible) but it works with government -- a
9 whole lot of sense that anybody -- we try to make sense to
10 ourselves and barely do it. But thank you very much and we
11 appreciate it and look forward to working with you in the
12 future.

13 (off record 11:05 p.m.)

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Bureau of Ocean Management Regulation and Enforcement

Public Hearing

Environmental Impact Supplemental Statement
Relating to Chukchi Sea Sale 193

November 4, 2010

Wainwright School Library

Wainwright, Alaska

VOICE CHECKED/CORRECTED

BOEM TEAM MEMBERS:

- Jeffery Loman, Deputy Regional Director
- Michael Haller, Community Liaison
- Michael Routhier, NEPA Coordinator
- Bob Peterson, Senior Geologist
- John Callahan, Public Affairs Officer
- Mary Cody, Wildlife Biologist
- Sharon Warren, Program Analysis Officer

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PROCEEDINGS

(On record at 7:20 p.m.)

MR. LOMAN: My name is Jeffery Loman, J-E-F-F-E-R-Y L-O-M-A-N. I'm the Deputy Regional Director with the Bureau of Ocean Energy Management Regulation and Enforcement, formerly MMS, in the Alaska Region. Thank you very much for coming. The reason I spelled my first and last name is we have a Court Reporter. Judy is going to be recording this.

This is a public hearing. It's a public hearing for the purpose of complying with the National Environmental Policy Act or NEPA. I'll -- we use that acronym NEPA frequently. National Environmental Policy Act, Federal environmental law signed into law by President Nixon requires a few things. Requires that the Federal Agency analyze a major federal action to see if it has the potential to affect the human environment. The major federal action in the case of tonight was the Chukchi Sea Sale 193 that took place in February of 2008. An EIS, Environmental Impact Statement, was prepared. And the Agency was -- decided to hold the oil and gas lease sale.

The Agency was sued, sued by ICAS, Native Village of Pont Hope, and a number of environmental advocacy groups. The case went to Federal court in the Alaska District. It was stalled for a while because there's another lawsuit in the courts in Washington D.C. I won't go into that very -- in detail, but the Alaska District Court withheld their decision until that case

was resolved, so that the Court could decide. And they did decide. And, for the most part, they decided that our Agency complied with NEPA. But there were a few things the Court found that the Agency needed to address. And we'll talk about that. But before I go any further, other than to say thank you for taking the time tonight to come here. We want to hear what your comments on the draft EIS, Supplemental EIS, if you have any comments about it. Want to hear your comments about offshore oil and gas in any context, as well, just because we want to communicate with you. And we want to become a better Agency and learn from your comments and ideas and concerns about offshore oil and gas.

Real quick, starting with Tim who's -- we are now calling Flying Tim -- we're going to introduce ourselves. And then we'll have you introduce yourselves. And we'll all spell our names for Judy the Court Reporter. Tim.

MR. HOLDER: Yeah, I'm Tim Holder, H-O-L-D-E-R. And I'm with BOEMRE in our Washington D.C. offices, opposed to everybody else who's in the Anchorage office. And I keep track of what's going on with the affairs of the Alaska office.

MR. ROUTHIER: My name is Mike Routhier, that's R-O-U-T-H-I-E-R. And I'm a NEPA Coordinator for the Agency, which means I work on these National Environmental Policy Act documents.

MS. CODY: Mary Cody, C-O-D-Y and I'm a Wildlife Biologist with the Anchorage office.

1 UNIDENTIFIED MALE: You're a what?
2 MS. CODY: A Wildlife Biologist with the Anchorage office.
3 UNIDENTIFIED MALE: Okay.
4 MS. WARREN: Sharon Warren, W-A-R-R-E-N. I'm the Program
5 Analysis Officer for the Agency in the Region.
6 MR. PETERSON: I'm Bob Peterson. I'm a Geologist and
7 Chief of the Resource and Economic Analysis Section. And that's
8 P-E-T-E-R-S-O-N.
9 MR. CALLAHAN: My name is John Callahan, C-A-L-L-A-H-A-N.
10 I'm the Public Affairs Officer for the Alaska Region. And I'm
11 taking a few photos tonight, if that's okay with you guys.
12 UNIDENTIFIED MALE: There's a \$4,000 donation that needs
13 to come to each of our pockets.
14 MR. CALLAHAN: Sure.
15 UNIDENTIFIED MALE: I'm kidding.
16 UNIDENTIFIED MALE: From you to him.
17 MR. LOMAN: We are the Bureau of Ocean Energy Management
18 Regulation and Enforcement. And we will no longer be showered
19 with any gifts. If we ever were.
20 UNIDENTIFIED MALE: They turned off the spigot.
21 MR. LOMAN: So we want to meet you folks.
22 UNIDENTIFIED FEMALE: Mike -- Jeffery.
23 UNIDENTIFIED MALE: Who's this?
24 UNIDENTIFIED MALE: Mike the Senior.
25 MR. LOMAN: Would you like to sit down?

1 MR. LOMAN: Herbert?
2 MR. WAINWRIGHT: H-E-R-B-E-R-T.
3 REPORTER: Can you speak up?
4 MR. LOMAN: Wainwright, Herbert.
5 REPORTER: Herbert, no last name?
6 MR. LOMAN: I'm sorry?
7 MR. TAGAROOK: T-A-G-A-R-O-O-K.
8 MR. LOMAN: K-A?
9 MR. TAGAROOK: T-A-G-A-R-O-O-K
10 MS. AKPIK: This is Clyde Akpik, A-K-P-I-K, his last name.
11 And my name is Cora Akpik, from Wainwright.
12 MR. LOMAN: Thank you for coming.
13 MR. AKPIK SR.: Max Akpik, Senior.
14 REPORTER: I'm sorry, I couldn't hear.
15 MR. HOPSON: Max Akpik, A-K-P-I-K, Senior.
16 MR. MICHAEL TAGAROOK: Michael Tagorook, T-A-G-A-R-O-O-K.
17 REPORTER: Everybody's going to need to speak up. I can't
18 hear.
19 MR. LOMAN: Yeah, well it's hard hearing if you're back
20 there. Yeah, if you can, really shout it out.
21 UNIDENTIFIED MALE: Like Bing, I think.
22 MR. LOMAN: Yes sir, way in the back.
23 MR. PATKOTAK: Who me?
24 MR. LOMAN: Yes sir.
25 MR. BLAIR PATKOTAK: Blair Patkotak, P-A-T-A-O-T-A-K.

1 MR. LOMAN: Thank you.
2 MR. NEGOVANNA: Raymond Negovanna, N-E-G-O-V-A-N-N-A.
3 MR. TERRY TAGAROOK: Terry Tagarook, T-A-G-A-R-O-O-K.
4 MR. HOWARD PATKOGAK: Howard Patkogak, P-A-T-K-O-G-A-K.
5 MR. OKTOLLIK: Enoch Oktollik, E-N-O-C-H O-K-T-O-L-L-I-K.
6 MS. MAYER: Lucille Mayer, M-A-Y-E-R.
7 MS. NASHOOKPUK: Isabel Nashookpuk, N-A-S-H-O-O-K-P-U-K.
8 MR. LOMAN: Thank you.
9 MR. AGNASAGGA: Ransom Agnasagga.
10 MR. LOMAN: Spell your last name please.
11 MR. AGNASAGGA: A-G-N-A-S-A-G-G-A.
12 MR. LOMAN: Thank you. Thank you very much.
13 UNIDENTIFIED FEMALE: Steve?
14 MR. SEGEVAN: And I'm Steve Segevan, S-E-G-E-V-A-N.
15 REPORTER: I'm sorry, could you say that again?
16 MR. SEGEVAN: Segevan, S-E-G-E-V-A-N.
17 MR. LOMAN: Are there any other participants we may have
18 missed? Yes sir.
19 UNIDENTIFIED MALE: Could you repeat what you said
20 earlier, to the people that just came?
21 MR. LOMAN: For the new people? Sure, you bet. I'm
22 Jeffery Loman. I'm the Deputy Regional Director of the Bureau
23 of Ocean Energy Management Regulation and Enforcement, formerly
24 known as the Minerals Management Service or MMS. And the reason
25 that we're here tonight is to hold a public hearing, because the

1 Agency has prepared a Supplemental, a draft Supplemental
2 Environmental Impact Statement, which is required under a Court
3 remand in a lawsuit, challenging the Agency's actions when it
4 did an Environmental Impact Statement for Chukchi Sea Sale 193,
5 that took place in February of 2008.
6 The Agency held that sale in 2008, issued 487 leases for a
7 total of about \$2.6 billion, with Shell Oil Company obtaining
8 \$2.1 billion of those leases. And the Agency was sued, sued by
9 the North -- the Native Village of Point Hope, ICAS, and a
10 number of environmental advocacy groups. And they challenged
11 the Agency's compliance with the Federal law called the National
12 Environmental Policy Act, or NEPA, asserting that we didn't
13 comply with NEPA.
14 The Court found that the Agency complied with NEPA, for
15 the most part. But there were a couple of provisions that the
16 Court found the Agency fell short. And those provisions are the
17 failure to analyze the effects of natural gas, and the
18 requirement to explain or analyze, evaluate under a Section of
19 NEPA called 1502, Section 1502.22, do an analysis under that
20 Section of about 40 pages of statements in the original EIS of
21 uncertainty or lacks of information.
22 For example, there's a statement in the original EIS that
23 says, there's uncertainty, scientific uncertainty concerning the
24 population structure of the bowhead whale. At that time, the
25 IWC, International Whaling Commission Scientific Committee, was

1 debating whether or not there were multiple populations,
2 multiple stocks, of the bowhead whale, like a Beaufort stock or
3 Bering stock. The IWC has since concluded that there is only
4 one stock.

5 So our job in that -- using that example, is to determine
6 whether or not there's any significance. Is there significance
7 to the Bowhead Whaler, which many of you are. Does it make a
8 difference if there's one or two or more stocks when you're
9 subsistence whaling? We think not. Whaling has taken place for
10 a long, long time, a lot longer than our Agency has existed, a
11 lot longer than, even than the use of oil and gas.

12 And the uncertainty regarding the stock, the population
13 structure has made little or no difference to the hunter. And
14 it makes little or no difference, we think, to the decision
15 maker who's got to decide on how to approve or not approve or
16 regulate offshore oil and gas activities. So, that's an
17 example, one example of the exercise that we have to go to --
18 through in this draft Supplemental Environmental Impact
19 Statement. And we think we have.

20 We're going to talk a little bit more about that, and
21 explain the legal action that took place. Explain a little bit
22 more about the document. And then we'll go to the important
23 part of this meeting. And that's to hear from you. And take
24 your comments on this draft document and talk together about
25 your concerns, ideas, comments that you may have about any

1 offshore oil and gas activity.

2 Because our Agency, as you know, is going through a
3 reorganization. And these are challenging times for us. And we
4 feel that we share the same challenges as the people in the
5 community of Wainwright.

6 Our work is as important to you as it is to us, really.
7 So we are facing together these uncertain times. And we need to
8 work together and communicate and talk and put our thinking caps
9 on and resolve conflicts and competing interests. And we look
10 forward to this conversation tonight. Sharon is going to talk a
11 little bit about this Court case before the Alaska District
12 Court. Sharon, you really will have to come over here unless
13 you can scream.

14 MR. OKTOLLIK: Before you go on, I didn't bring a pen.

15 MR. LOMAN: Need a pen? You probably need a book to write
16 on, too. But we have to return it. That paper's got my name
17 and phone number on it, in case you don't like what I say
18 tonight.

19 MR. OKTOLLIK: All right.

20 MR. LOMAN: Thank you Sharon.

21 MS. WARREN: Okay, thank you. As you know, what Jeffery
22 said, was that it went to the District Court in January of 2008.
23 And the sale was held in February of 2008. Also, the fact that
24 we have lease sales, based on a five year program. And the Sale
25 193 was in the five year program for 2007 through 2012. That

1 five year program was sued by the environmental organizations in
2 the D.C. Circuit Court. And so, that is why that this case just
3 kind of sat there in the District Court waiting to find out what
4 was going to happen with the D.C. Court. Because the D.C. Court
5 remanded back to the Secretary, his decision, on whether or not
6 to keep the Arctic Sales in that five year program.

7 So that was going back and forth with the D.C. Court. And
8 the Secretary had to do the Environmental Sensitivity Analysis,
9 is what it was called, part of the OCS Lands Act, the Outer
10 Continental Shelf Lands Act. So they had to meet that
11 requirement of the law. The Court, in that situation said,
12 Secretary, you didn't meet the requirement of the law. You need
13 to go back and meet the requirement of the law. So, that's what
14 happened to the sale. The sale was sitting in the District
15 Court because we had the lease sale.

16 So we had the five year program in the D.C. Circuit Court.
17 We had the lease sale in the District Court. A lot of
18 litigation going on during that time. So the D.C. -- so the
19 Secretary -- they finally decided, you know, we're making
20 progress on this. And let's start briefing again on this
21 District Court case on Sale 193. As you know, the Secretary
22 came out with a preliminary Advice (ph) Program in March 31st to
23 keep Sale 193 in the five year program. But did not keep the
24 remaining Arctic sales in the five year program. So there was
25 two Beaufort Sea Sales planned and two of the Chukchi Sea Sales

1 planned. And those were removed from the five year program. So
2 we only have one Arctic Sale that was held in this five year
3 program.

4 So the District Court began looking at all the briefs that
5 were filed. And there was a lot of allegations by the
6 Plaintiffs saying how we didn't follow NEPA. You know, we
7 failed to look at all these things that we should have been
8 looking at. So when the District Court Judge, Beistline, issued
9 his decision in July 21st of this summer, he said, I've looked at
10 all this. And I've looked at everything that you've alleged
11 that the Agency hasn't done. And for the most part, the Agency
12 did take a hard look. They looked at all these things. But you
13 need to go back, and like Jeffery had said earlier in his
14 opening, is you need to look at these three things. And these
15 were the only three concerns that the Judge had.

16 And that's why the document you'll see tonight, and Mike
17 will explain further about it, is focused because it's based on
18 the Court remand, because everything else in that litigation has
19 been decided by the Judge. So we're just left with these
20 concerns that the Judge had on the environmental impacts
21 concerning the natural gas and then the missing information and
22 the cost to get that missing information. We need to look at
23 that, as well.

24 What's going to happen next is that once the comment
25 period is closed, the comments are taken, the public hearings

1 held, we'll be doing a final Environmental Impact Statement.
2 And that final Impact Statement, after it's completed, will go
3 to the Court, because the Judge has kept the case before him.
4 So he'll look at our final Impact Statement. He'll also look at
5 the documents and any other documentation that we use to make
6 that decision on the final EIS. That will be filed with the
7 court. The Plaintiffs who sued us will also have that before
8 them. And there'll be briefs between the legal representation.
9 Then the Judge will decide whether or not that we will --
10 whether or not we met our NEPA obligations in this court case.

11 The Judge also later issued an Order and set a timetable
12 of what he thought would be the time sufficient to do this. And
13 he gave a timeframe, six months from July 21st. So January 21st
14 of 2011 he thought that would be a reasonable time for the
15 government to make a reasonable effort to comply with his Order.
16 And so that's why you see what we have today, the focus of the
17 document and then the timeline that we're working from is from
18 what the Court has said in his order.

19 MR. LOMAN: Sharon, we have till January 21st to submit a
20 final EIS before this Court. How long do these folks have to
21 make comments on this draft?

22 MS. WARREN: You have until November 29th. There's a 45
23 day comment period. So your comments is -- it's open until the
24 29th of November.

25 MR. LOMAN: How can they submit comments?

1 MS. WARREN: You can submit comments by -- in the EIS,
2 hopefully you have a copy, if not. But you can submit comments
3 to our Department by mail. You didn't get in --.

4 UNIDENTIFIED MALE: (Indiscernible) Supplemental EIS?

5 MS. WARREN: Yeah it's the Supplemental EIS. And in the
6 beginning of the document it says precisely how you need to
7 submit the comments. What it needs to say on the comments so
8 that we know when we get it in there. And I think it's the
9 first page. So -- I don't have one in front of me. But,
10 there's a email address that you can use. There's a specific
11 email address to use to submit your comments. You can mail them
12 in, as well. So if you don't have the EIS here, even though
13 they were FedExed here. But apparently FedEx doesn't deliver
14 next day service, it looks like.

15 MR. LOMAN: Has anybody spotted it in the library here,
16 because we did spot them in the library at Point Hope.

17 UNIDENTIFIED MALE: (Indiscernible).

18 MR. LOMAN: Somebody's got one.

19 MS. WARREN: You've got one?

20 UNIDENTIFIED MALE: I called the State and I got it
21 through the computers.

22 MR. LOMAN: Yeah, you can get it online.

23 MS. WARREN: Yes you can get it online. Our website has it
24 online so it's a -- you know -- you can read it online as well.

25 MR. LOMAN: Does anybody have an extra copy that they

1 brought to give away tonight?

2 MR. HALLER: Yeah.

3 MR. LOMAN: Mike did, so --.

4 MS. WARREN: Okay we have another -- an extra one.

5 MR. LOMAN: We'll hold a (indiscernible).

6 MS. WARREN: Yeah.

7 MR. CALLAHAN: I think I have two back at our hotel room.

8 MS. WARREN: Okay.

9 MR. LOMAN: Yeah we don't need to take any to Barrow. We
10 know they arrived in Barrow in large numbers.

11 MS. WARREN: Okay.

12 MR. CALLAHAN: If you want one of mine, please see me
13 afterwards.

14 MS. WARREN: Is there any other questions?

15 MR. HOPSON: Your State, right, State of Alaska Court
16 you're talking about?

17 MS. WARREN: No, Federal.

18 MR. HOPSON: Oh, Federal.

19 MS. WARREN: United States District Court for the District
20 of Alaska, Federal.

21 MR. HOPSON: Oh -- okay.

22 MS. WARREN: We're in the Federal. Yeah, this is the
23 Federal. Yeah, the State has a lot of stuff going on as well.
24 But, no, we're the Federal and so it goes to Federal Court.

25 MR. LOMAN: Thank you Sharon. Any questions about this

1 litigation?

2 UNIDENTIFIED MALE: Yeah, you stated earlier that the
3 Secretary of Interior or somebody (indiscernible) in the five
4 year program. And right now it's fit right into the five year
5 program?

6 MS. WARREN: Yeah, this is an interesting situation
7 because the five year program -- there was a preliminary revised
8 five year program that was done. That was out on the 31st of
9 March and then public comments were taken, okay. There is not
10 yet a final revised program, okay. So the Secretary still needs
11 to make a decision on that five year program, in addition to
12 doing this as well. So if the Secretary, you know, he's got to
13 decide that Sale 193 will be kept in the five year program. He
14 decided, at least at the preliminary stage, it would be. But
15 now they're reviewing those comments. And so he has to make a
16 decision, after reviewing those comments, whether or not it will
17 stay in the final five year program.

18 If it doesn't stay in the final five year program, then
19 this case is going to be -- not relevant anymore. Because it --
20 he removed it from the five year program, so --. So there's
21 several things that need to happen by the Secretary.

22 MR. LOMAN: Thank you Sharon. Any other questions for
23 Sharon? Mike can you come up and talk a little bit about the
24 preparation of this document? Mike was probably the principal
25 person that worked on this draft Supplemental Environmental

1 Impact Statement. And he can tell you what he did to try to
2 address this Court remand. Mike.

3 MR. ROUTHIER: Sure. I was actually on my third day of
4 work with the Agency that we got the remand so --.

5 MR. LOMAN: We put him right to work on this.

6 MR. ROUTHIER: Yeah. So it was pretty interesting, but
7 yeah. So we got the Judge's remand. He was pretty specific
8 about what he wanted. He didn't give us very specific
9 directions on how to do it, but we went with was a Supplemental
10 EIS. It's a pretty intensive amount of analysis. And it also
11 allows us the opportunity to have public comments and to go out
12 and meet the people that are going to be concerned about it. So
13 we're pretty happy with that process.

14 As to the analysis itself, as you probably remember, the
15 first bit of that remand, the Judge told us to do analysis of
16 the environmental impacts of natural gas development and
17 production. So we needed -- our Environmental Analysis Section
18 needed, like a scenario to analyze. We needed an idea of what
19 the natural gas development and production could entail, what
20 kind of development, what kind of production. So, for guidance
21 on those issues, we consulted with our Resource and Economic
22 Analysis Section. And Bob here leads that Section. So he can
23 fill you in a little bit on how they developed this scenario.

24 MR. PETERSON: So, we do the Resource and Economic
25 Analysis. So Mike's group, they needed something concrete to

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1 analyze -- to study the effects of. My group is Geologists and
2 Engineers primarily. We had already, under the original
3 document, looked at the oil potential, came up with an oil
4 scenario that, one, given a successful case, would expect in the
5 Chukchi Sea.

6 The Judge also wanted to see a gas case. Part of our
7 determination was, yes, there were large quantities of gas
8 potential in the Chukchi. And one of those is that the gas was
9 going to be associated with the oil. Oil, really, is where the
10 big value is. You just didn't see a case where you're just
11 going to have a gas field on its own. So it's going to be an
12 oil field with gas, and this really drove our scenario. So we
13 were going to have, given a discovery, an oilfield with
14 development off shore, the drilling of the oil, a pipeline to
15 the shore, a shore base developed somewhere along the Chukchi
16 coast. And then an oil pipeline that would go across the NPRA
17 and hook into the existing TransAlaskan Pipeline.

18 The oil would be paying for a lot of the infrastructure.
19 After we had a reasonable estimate of about 10 years, we could
20 begin to see gas development. This would be from the same
21 offshore facility. There would be a second pipeline to shore,
22 more onshore infrastructure development at the coast, a second
23 gas -- a second pipeline built, this time a gas pipeline. And
24 it would run along the same right-of-way, both offshore and
25 onshore, across NPRA.

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1 And this is a little leap of faith. But we had to assume
2 that either the Denali Pipeline or AIGA Pipeline or some gas
3 pipeline is going to be built from the North Slope. And this
4 gas pipeline from the Chukchi would hook into that somewhere in
5 the Prudhoe Bay area and take the gas somewhere south, wherever
6 that may be. So now, Mike's group would have a scenario of oil
7 development to begin with, that oil infrastructure built and
8 then a second pulse of activity which would be the gas
9 development.

10 We also looked at some of the economics. As you know, the
11 North Slope Borough gets almost \$240, \$250 million a year from
12 the property tax of onshore facilities around the Prudhoe Bay
13 area. We estimated that there could be \$2 to \$2.5 billion worth
14 of onshore development that would be taxable, property taxable,
15 due to the onshore landing, oil infrastructure, pipeline, roads,
16 oil compressors.

17 There would be, at a delayed time, because you're going to
18 produce the oil first and then later the gas. At a later time,
19 you would then produce or have to build the gas facilities
20 onshore and a gas pipeline. And that could be worth another
21 \$1.5 billion investment onshore for the gas facilities. You
22 might also think -- like to mention that this all is going to
23 take time.

24 First oil production could be 12 to 15 years in the
25 future. Of course nobody's drilled the first well yet or made

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1 first discovery. But, from that date, you could expect 12 to 15
2 years before the first oil production. You could then, very
3 easily, look at another 10 years before the first gas production
4 came. So you'd have 10 years of oil production, roughly another
5 10 years of both oil and gas production with the oil production
6 headed down. And then the oil production would halt. And then
7 there'd be another period of time where you would only have gas
8 production.

9 So that was pretty much the scenario and the timeline that
10 we left Mike with. And, again, we looked at some of the
11 economic infrastructure that would be built onshore and realized
12 there would be the pulse of spending for oil. And then a second
13 pulse later on, spending for the gas facilities.

14 Any questions on how we envision this working? Sir.

15 UNIDENTIFIED MALE: On this lots of oil and gas you're
16 seeing out there, you're talking about 20 years. And yet I
17 can't follow you here because alternative energy there's -- our
18 world is coming where they look at the alternative energy.

19 MR. PETERSON: Yes.

20 UNIDENTIFIED MALE: Do you feel that we just get to rely
21 on oil and gas up here, all of us here or whatever,
22 (indiscernible) stuff like that? What will become of it -- if
23 it's not utilized and you find other source of alternative
24 energy.

25 MR. LOMAN: I think it's safe to say that with the most

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1 heightened vision of the alternative energy development, given
2 the use and demand for energy, if Bob's scenario played out and
3 you started in on a production that soon, you would be looking
4 at taking all of the resources that we think may be, even at the
5 highest estimation out of the Arctic. That being said, we go
6 back to what the first Chairman of OPEC said, who was a sheik
7 form Saudi Arabia, when they asked him back in the 60s, I think
8 it was the 60s, how long he thought oil and gas would support
9 these countries in OPEC. And he said, the Stone Age didn't end
10 because they ran out of stones. And I think it's probably the
11 same thing in the case of oil and gas. There'll still be oil
12 and gas. When we move to other sources of energy -- going to
13 the last drop of oil and the last bit of gas before we really
14 move to other alternative energy is kind of a scary thought.

15 But we think that -- we think -- we don't know and won't
16 know until exploration occurs and confirms or negates what we
17 think, that the oil and gas resources in the Arctic could be
18 larger than the largest oilfield on earth. So it is a
19 substantial amount. But the demand is huge and the United
20 States is getting most of their oil and gas, by far, from abroad
21 now. Not at necessarily the right price, and not from people
22 who we're in love with. Or, they're not in love with us. We
23 have lots of love.

24 MR. PETERSON: Alternative energy, I think, has some
25 interesting, you know, additions to the whole nation's energy

1 needs. And yet, at the same time, you know, the companies and
2 its -- money that they're investing, are continuing to believe
3 that we are going to need more oil and gas and more coal. So I
4 don't think 15 or 20 years from now there's going to be any
5 reduced demand for oil and gas. And I guess, again, the only
6 support of that is, that many people are still very willing to
7 spend the amount of money it takes to find additional quantities
8 of oil and gas anywhere in the world and, certainly in the
9 Arctic.

10 UNIDENTIFIED MALE: Some of us, (indiscernible) would
11 probably be (indiscernible). I know they have done studies of
12 exploration of oil and gas probably. I didn't know what date
13 you all would go back. But, they have done studies before and
14 probably around the Bering Sea and along through the Chukchi Sea
15 and the Beaufort Sea. And I always want to try to see the broad
16 picture because most of our bodies of waters are the Outer
17 Continental Shelf, also?

18 MR. PETERSON: Yes.

19 UNIDENTIFIED MALE: How far has that research gone with
20 the whole Bering Sea, the Chukchi Sea and the Sea -- how much is
21 that potential of oil and gas?

22 MR. PETERSON: That's a very interesting -- intriguing
23 question. There's been a lot of work at different levels.
24 Currently, as we speak, every 10 years -- I'm sorry -- yeah
25 about every 10 years we do an updated oil and gas assessment for

1 the offshore. And in our case, for all of Alaska's offshore.
2 Some areas we know a little bit more about, because we have
3 seismic and -- two primary things -- are seismic and wells.

4 In the Arctic we have 35 wells, 30 offshore in the
5 Beaufort or the Beaufort Sea and five in the Chukchi. That's
6 not very many at all. So we have seismic where we can identify
7 tracts. And we have a few wells that say the key components for
8 oil and gas is there. That's what we base our estimate on.

9 Something we haven't, or I haven't mentioned yet today,
10 we're assuming in our scenario a success. We have basins like
11 St. George and Norton Sound where we have gone out -- or
12 companies have gone out and drilled where we had some very
13 optimistic estimates of oil and gas. They drilled them and
14 found nothing and the geology was bad. Reservoirs were missing
15 or there was no indication that oil was in the system at all.
16 So the result could be that after companies go out and drill
17 some wells, they'll all be negative. And they'll decide there
18 is no potential in Alaska.

19 So that's also, you know, a possibility. But the impacts
20 of that, of course, are very minimal. And we're looking for the
21 large impacts that could occur, or any impacts that could occur
22 given a successful case where you go to development. Did I sort
23 of answer your question?

24 UNIDENTIFIED MALE: Didn't our (indiscernible) you say
25 estimates? When you say estimates you do -- we don't really

1 know what's out there even from past oil and gas tests?

2 MR. PETERSON: I can tell you a little more in detail how
3 we do our estimates. We have seismic data. I don't know how
4 familiar you are with seismic data. But it allows us to map the
5 subsurface, what the surface of the earth looks like 5,000,
6 10,000, 15,000 feet deep.

7 We know to have an oilfield you have to have three things.
8 You have to have oil that's generated in the area. You have to
9 have a reservoir rock. Prudhoe Bay is the (indiscernible)
10 sandstone so you have to have a rock where the oil can be stored
11 and you have to have a trap. Oil is lighter than water. So if
12 you can see a -- those structures in the earth, oil could
13 potentially be trapped there. To have an oilfield you have to
14 have all three at the same place. You have to have a trap. You
15 have to have oil generated. And you have to have the reservoir.

16 We don't really know what we don't know. One of the
17 elements we do know is the trap. When the companies go out and
18 shoot the seismic data, they're now able to map traps in the
19 subsea and they've mapped many traps in the Chukchi Sea. So
20 that's very -- that's one good potential that they have. The
21 five wells that they have drilled say that there are sandstone
22 reservoirs there. So they know those, at least, exist out
23 there. And a number of them have oil and gas in them, not
24 enough to be economic but it indicates that there is oil and gas
25 in the area. That's what we base our estimates on.

1 We can look at the number of traps and we can kind of just
2 add them up and, you know, in some areas maybe we see 10 traps
3 every few hundred square miles. And we can assume it's like
4 that in places where we don't know as much. That's an estimate
5 of that potential. We can then say, well, we think the sands
6 will be there. It's a risk that they're there, but we think
7 maybe two out of 10 will have the sands there. And that's how
8 we kind of filled up our estimates. They're based on knowledge,
9 you know, the baseline knowledge that we know. And then we
10 estimate, you know, further up the lines to try and think how
11 much oil and gas is reasonable to be there.

12 We also make estimates of most optimistic, the most
13 pessimistic, to give our -- an idea of how big a range that our
14 estimates are. But we kind of work in the middle that we think
15 it's the most likely. Again, has that addressed?

16 UNIDENTIFIED MALE: Yeah, I think, yes.

17 MR. HOLDER: Another way to answer your question is that
18 in the '75 to '85 period in the last OCS, industry spent about
19 \$11 billion in the winning of bids. And, after that, in '86 the
20 price of oil crashed. And so, just about everybody went away
21 and the amount that industry spent on leases subsequently was
22 much smaller. It was like in the \$100 or \$200 million. And
23 they backed away.

24 MMS has a process where industry can express interest in
25 lease sales in any of the Outer Continental Shelf. And until

1 2005, industry -- well Shell had been interested in about 1990
2 and did some exploration. They backed away till 2005. They
3 said they're interested. And then, as Jeff pointed out, in 2008
4 there was about \$2.6 billion put down on those leases. So
5 that's kind of in a snapshot of -- they have been full of
6 industry interest.

7 UNIDENTIFIED MALE: Maybe I might ask you a question, all
8 right (indiscernible). They stated that Shell Oil spent \$2.1
9 billion?

10 MR. HOLDER: Yes. Right.

11 UNIDENTIFIED MALE: On a (indiscernible) of sea shelf?
12 And there's some \$2.7 billion from -- a lot of lease sales? To
13 myself -- maybe the others would know -- how is this money
14 spent? I mean, where does it go?

15 MR. LOMAN: To the Treasury, to the U.S. Treasury.

16 UNIDENTIFIED MALE: U.S. Treasury?

17 MR. LOMAN: Yes.

18 MR. HALLER: We don't get any of it.

19 MR. LOMAN: Yeah, you could say, I guess, because it
20 influenced the Coastal Impact Assessment Program funding about
21 \$35 million. In the Chukchi Sea Sale increased the amount of
22 Coastal Impact Assessment Program funding that went to Alaska,
23 \$35 million after that Chukchi Sea Sale. But right to the U.S.
24 Treasury it goes.

25 It's a federal resource. The Agency is second only to the

1 IRS in collecting money, money from lease sales, money from
2 royalties from oil and gas.

3 MR. PETERSON: I'll just finish up saying we do have these
4 estimates. But they remain estimates. That's why you now --
5 someone needs to prove it up. And that's why you drill the
6 well. It will always remain an estimate until someone actually
7 drills the structure out there, penetrates it and finds out
8 what's actually there.

9 UNIDENTIFIED MALE: And we -- if we find out the major
10 players, all the major players, if they all come out together we
11 will find out also that something's out there, have a large
12 amount?

13 MR. PETERSON: Well just the players that are out there.
14 And, you know, at this point there's really just a handful of
15 players out there. But, there are not a lot of people that can
16 spend that kind of money. So it's a pretty exclusive group of
17 companies. But, they would be the ones to go out and drill
18 those exploratory wells.

19 MR. LOMAN: Thank you Bob. Now, Mike is going to finish
20 up talking about the draft Supplemental Environmental Impact
21 Statement. Mike, Bob and his staff gave you this scenario. And
22 I read the document. Some of these folks might have too, or
23 they will. So, if you could answer the question, this scenario,
24 natural gas scenario, how much different is it, really, from the
25 effects of the oil production scenario? And how much more

1 analysis needed to be done? Kind of start there and then
2 continue on.

3 MR. ROUTHIER: Sure. It's -- the effects are pretty
4 similar. In fact, but, in a way they are a little bit less. In
5 fact, you might be able to view as a subset.

6 One important point was that no additional exploration
7 would be needed to find the gas. Because, if the gas is going
8 to piggyback off the existing oil infrastructure -- well, all
9 the stuffs already there. We don't need to go exploring for
10 more. We've already got the wells in here. We're getting into
11 the oil. We're using the gas to keep the pressure up. So, I
12 mean, we know where the gas is. We don't need to explore. So
13 all those impacts are not going to be duplicated.

14 What impacts there will be are basically from development
15 of an offshore pipeline. You know, we're not going to have a
16 pipeline in place to get the gas from the platform to shore. So
17 we'll need a gas pipeline. But we could use the same corridor
18 that the oil pipeline is currently using.

19 We need an onshore facility to help process the gas. And
20 then we'll need an overland pipeline. But, again, use the same
21 corridor that the pre-existing oil pipeline could, at that point
22 in time, be in. So, the effects were pretty similar to the
23 effects that we had already analyzed for the oil. And we tried
24 to organize it pretty logically in the document where we first
25 summarized the impacts from the oil. And then we summarized the

1 projected impacts from the gas development. And then summarized
2 the projected impacts from the gas production. So we tried to
3 organize it pretty logically in that manner.

4 And that was about it. We had our whole team of analysts
5 working on it, scientists like Mary here. A variety of
6 disciplines looked at Bob's scenario and gave their analysis on
7 it. So, and that takes care of that first part, the Judge's
8 remand.

9 The second and third concerns of the Judge's remand, both
10 pertain to that 1502.22 regulatory process. Basically, there's
11 provisions in the Federal regulations that say, when you have
12 incomplete or missing information in a NEPA document like this,
13 there's a certain process that you have to follow. And the
14 Judge found that the Agency did not do a good enough job the
15 first time around. He said, do it again. So we did it again.

16 We developed a more logical and sequential process to keep
17 everything objective and keep our analysis focused on the right
18 things. And we ran it through our analysts. They came out with
19 their conclusions. And we memorialized the conclusions for
20 every item of missing or incomplete information in Appendix A
21 here.

22 Basically, the Plaintiffs in the lawsuit we talked about
23 before submitted a large exhibit that included a variety of
24 statements pulled from our documents where it referred to
25 information that was incomplete or missing, stuff like that. A

1 lot of it was background information. So we catalogued all
2 those, plus we went back, reviewed our own documents, and just
3 to try to ensure that we had captured all the references that
4 the Plaintiffs may have missed some. So we reviewed it again
5 ourselves and tried to look for more. We found a few more,
6 maybe like 30. And we included those in this analysis, where a
7 few of our analysts used a sequential process and memorialized
8 all the analysis from Appendix A, which is there for your review
9 in this document. And that was it.

10 MR. LOMAN: Any questions about the draft Supplemental
11 Environmental Impact Statement?

12 UNIDENTIFIED MALE: I have a question. You said that a
13 lot of people had filed on (indiscernible) 2008 and the court
14 (indiscernible) the Court doesn't need to address three
15 concerns, right?

16 MR. LOMAN: Uh-huh (affirmative).

17 UNIDENTIFIED MALE: How close are you in addressing those
18 concerns before the Ninth Circuit Court can accept your EIS?

19 MR. LOMAN: Well, we're not in the Ninth Circuit Court
20 yet. We're still in the -- before the Alaska District Court.

21 UNIDENTIFIED MALE: Okay.

22 MR. LOMAN: We've got the draft Supplemental Environmental
23 Impact Statement. We're using the standard, pretty much
24 standard, NEPA guidelines to move that document along. Taking
25 public comments now. That will end on November 29th. Then we'll

1 move to address those comments, which is required under NEPA and
2 answer them, answer questions, explain things. Finalize the
3 draft Supplemental EIS, after taking these comments into
4 consideration. And then the next step is, file it with the
5 court and look for a record of decision.

6 Record of decision could be, reaffirm the sale. And the
7 Secretary would reaffirm the sale. Or the Secretary would not
8 reaffirm the sale. Given the draft Supplemental Environmental
9 Impact Statement, the document we have today, we're talking
10 about today, my recommendation to the Secretary of the Interior
11 would be to reaffirm the sale.

12 This exercise of analyzing natural gas, was it necessary
13 under NEPA? Yeah. And like Mike just explained, no extra
14 seismic activity, none -- no exploration activity. These are
15 all the activities that are right before us. And the
16 development activities, the effects from development are many,
17 many years away. In fact the effects of development of natural
18 gas are so far off into the future, this young man may be in
19 charge of that. I'll be dead, that's how long. I will be. I'm
20 going to be dead. I don't mean to be morbid. We're talking
21 many, many, many years down the road.

22 And so, not that, you know, we didn't have a requirement
23 to do it under NEPA, and now we have. And the 1502.22 analysis
24 speaks for itself. The methodical evaluation of each and every
25 one of those items has been done. So, given that, I'm ready to

1 say right now, not that I can't be, you know, persuaded that we
2 need to do additional things, during the middle of a public
3 comment period. We certainly can. We're hearing lots of good
4 ideas. And we're only about half way through our meeting with
5 the communities and the government to government consultations.
6 But none of them pertain to this particular issue, necessarily.

7 But we could do more. But right now -- if the Secretary
8 of the Interior walked through that door and said, where are we
9 headed with this, I would say reaffirm the sale. Don't think
10 that will change, but that's just a guesstimate at this point in
11 time.

12 By January 21st which is in our time lifeline, extremely
13 fast, because it's just right around the corner, the Secretary
14 will have some decisions to make.

15 UNIDENTIFIED MALE: Now, you made a good point of that.
16 You're going to be dead when this all takes, you know, in the
17 future too. You know we got our grandkids that's going to grow
18 up, up here. I don't know where your family's from but, you
19 know, that's -- that's our backyard. Do not act dumb, but we
20 just ask, like you say. The future is going to be affected.

21 MR. LOMAN: I don't have any children. I don't have any
22 grandchildren so I have to worry about yours, I guess.

23 UNIDENTIFIED MALE: Well I do, you know.

24 MR. LOMAN: Yeah and that's part of our job. That's part
25 of our job is to worry about you, your children and your

1 grandchildren and so on.

2 UNIDENTIFIED MALE: And, in my opinion, as well, it's the
3 part of our job, like he said, to look after our children and
4 grandchildren. Well, I've got to also think about how are they
5 going to make a living, you know. The population's getting
6 bigger but the job status is that it's status quo. We don't
7 have jobs to provide our young people. They're going to have to
8 get up and leave town. That boy right there is going to have to
9 go to college and not come back because there'll be no jobs
10 here.

11 We have to be able to develop our community in a safe,
12 sound manner so that we -- our families can come back and work
13 and be at home. That's another aspect of looking at the
14 livelihood of our families. There's not enough jobs. There's
15 five of us in here who have had jobs the whole summer because of
16 oil and gas, right now, because of oil and gas. There was none
17 when we had these jobs. Thank you.

18 UNIDENTIFIED MALE: Another point I wanted to make. You
19 know, like you said, the Borough only tax, what \$250, how many
20 millions, last year -- \$250 million, right? What was the
21 profits of Shell last year? You know, there's a big difference
22 in the world. We're running this Borough, on not very much,
23 compared to the profits that you guys are making.

24 MR. LOMAN: Last night at the meeting, a lady said I
25 worked for the oil and gas company.

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1 UNIDENTIFIED MALE: You guys say, yeah, we get the taxes.

2 MR. LOMAN: I don't work for the oil and gas company. I
3 work for the government. I serve you.

4 UNIDENTIFIED MALE: Yeah.

5 MR. LOMAN: But do the oil and gas companies -- and I
6 think your point sir, is well taken. The oil and gas companies
7 make a lot of money, a lot of money, a lot of money. That's
8 your point.

9 UNIDENTIFIED MALE: The market is shot.

10 MR. LOMAN: Go ahead. I'm sorry, I didn't mean to
11 interrupt.

12 UNIDENTIFIED MALE: But we're expected to take care of our
13 -- with that \$250 million, run everything up here with the costs
14 so high. And on top of that, try to create jobs and everything.
15 It's -- I don't know what it's like in the Borough but it's got
16 to be hard.

17 Just like with the federal government, you know. You're
18 running our government, leaving it without any money. That's
19 the truth, leaving a deficit. No China money you know -- we're
20 a slave to China for real.

21 UNIDENTIFIED MALE: The North Slope Borough gets its money
22 from tax and property tax and that is declining because of the
23 aging infrastructure. And creating a pipeline and creating
24 onshore infrastructure, the property tax will increase. And the
25 North Slope Borough will have more money to sustain itself. The

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1 Borough is not running on a deficit. It's running at a break
2 even, with some funds being put away for future use. Not like
3 the Federal government, where there is so many trillion in the
4 hole and who knows what will happen.

5 UNIDENTIFIED MALE: The Federal government is the one that
6 (indiscernible), you know. Would it (indiscernible).

7 UNIDENTIFIED MALE: I don't know it's a lot deeper.

8 MR. LOMAN: What is your biggest concern? If there is one
9 thing that is -- bothers you the most with respect to offshore
10 oil and gas?

11 UNIDENTIFIED MALE: I notice (indiscernible) done correct.

12 MR. LOMAN: Safety?

13 UNIDENTIFIED MALE: If there is a correct way.

14 MR. BLAIR PAKTAOTAK: I feel like, I guess, for the
15 welfare and well being of our community like, no discussion of
16 natural gas heating their homes and there's a -- lot cheaper
17 than transporting diesel, what they're doing right now to heat
18 our homes. Our businesses are burned by diesel. And it's
19 transported to the barge. I read somewhere that -- looking to
20 the gas, analyze the gas, whatever to -- see if it's feasible,
21 for Wainwright to get that. You guys have no -- anything to do
22 with that except the oil companies who drill for that, right?

23 MR. LOMAN: You're talking about Alpine and the natural
24 gas?

25 MR. HOPSON: You're right, Blair. That gas issue in the

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1 book that you're reading, would be between Wainwright and the
2 producer. It wouldn't -- the Federal government couldn't
3 mandate the oil companies to give us free gas or flat gas, or
4 whatever it would be, between the community and the development
5 -- the developer.

6 MR. BLAIR PAKTAOTAK: We'd have to talk to them too, to
7 see if we can go about that, getting heat to producing oil and
8 gas, right?

9 MR. LOMAN: That's -- it's a business deal where an
10 arrangement, a legal agreement or agreement between the
11 community, and the case in Nuiqsut, and the producer, yes. I
12 think what you're talking about, and John is certainly right --
13 we can't make a company give a community gas or anything else,
14 really.

15 Even the Conflict Avoidance Agreement in a recent court
16 decision which kind of exemplifies what I learned after working
17 for the Bureau of Indian Affairs for 10 years, a lot of times
18 you sue and you win, but you lose. And the lawsuit involving
19 the conflict avoidance -- it was actually challenging
20 exploration. But the issue of the Conflict Avoidance Agreement
21 -- the court found that neither than MMS, our Agency, or
22 National Marine Fisheries Service, is a party to the Conflict
23 Avoidance Agreement -- couldn't do anything to force anybody to
24 come to it if it wasn't reached. Couldn't do anything if it was
25 breached by either party. And so, in other words, the Federal

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1 government, just two Agencies standing on the sidelines puffing
2 up their chest and walking around powerlessly.

3 And so that essentially means the Court found, and that
4 was the Ninth Circuit, that this agreement is between the Alaska
5 Eskimo Whaling Commission and the industry alone. Last night,
6 however, when we were talking about -- a little bit about the
7 reorganization of our Agency, I mentioned earlier. Everybody
8 may not have been here then. We're not done reorganizing.

9 We're going to change our name again. The Regulation and
10 Enforcement will go to a new Agency that's about to be created
11 called the Bureau of Safety and Environmental Enforcement. Our
12 inspection arm of the Agency will become a stand alone Agency.

13 The Bureau of Ocean Energy Management will move forward
14 and do environmental reviews, interface with the public.
15 Probably do everything but those enforcement activities. And
16 they don't know exactly, yet, because they're working on how to
17 create an Agency that regulates the industry that will do first,
18 one thing. You might be the most interested in this, since your
19 concern is safety -- most interested.

20 UNIDENTIFIED MALE: Thank you. (indiscernible) you're
21 already talking, the government's trying to expand, you know.

22 MR. LOMAN: Not necessarily expand, do something right for
23 a change. They want to create an Agency that restores public
24 trust, restores public trust.

25 UNIDENTIFIED MALE: Another thing I wanted -- just ask

1 before you going any further. You know, if Obama doesn't get
2 re-elected in 2012, is all this going to just keep going on the
3 way it started out? Like MMS spinning into these different
4 fields or is that going to -- is it go back to what it was
5 before?

6 MR. LOMAN: Well, look at history. MMS was, at one time -
7 - the activities that MMS did were done by BLM employees and
8 USGS employees. And then they created MMS. And that was -- I
9 don't remember, because I wasn't working for them at the time.
10 But there was either a Republican or a Democrat as President,
11 whoever it was, they were. And then they went to another one
12 and then they went -- so it continued on. Government continues
13 on. I'm not a political appointee. I'm not, one, an employee
14 of an oil company. I am not an employee of an oil company.

15 UNIDENTIFIED MALE: You thinking, like I was jacking you.

16 MR. LOMAN: I am not an employee of an oil company. You
17 can attack me all you want but you're attacking somebody that
18 serves you. I serve you.

19 UNIDENTIFIED MALE: Look and see what I'm feeling.

20 MR. LOMAN: I know how you feel. I know how you feel and
21 you know that's why --.

22 UNIDENTIFIED MALE: Want to see just --.

23 MR. LOMAN: That's why --.

24 UNIDENTIFIED MALE: Feel very, very bottom, zero, zero,
25 zero, zero, zero, whatever percent I'm (indiscernible).

1 MR. LOMAN: Well when I see somebody that thinks that, you
2 know, that I don't serve you. I'll come back pretty strong and
3 say, I serve you. I serve you just as much as I serve any oil
4 company. I serve them too, a part of my job.

5 But -- so this new Agency that they're going to create,
6 that they want to restore the public's trust, including yours --
7 they've asked for recommendations from us. And we've said,
8 well, we think you need to create an Agency that is feared and
9 respected by the industry. Feared and respected by the
10 industry. That doesn't mean the industry is afraid of them like
11 in the context. Feared because of their capability to regulate
12 them -- their respect and fear together that industry, in a real
13 strong way.

14 Last night, with the leaders in Point Lay, it was brought
15 up that the Agency's regulatory arm needs to have a component
16 that protects the Inupiat culture, protects subsistence whaling.
17 Protects other subsistence activities. Protects the culture,
18 the Inupiat culture, from all kinds of other activities that be
19 -- come from integration into the community, et cetera, et
20 cetera, inasmuch as the law allows.

21 And I had recommended, already, a much broader set of
22 expertise than just drilling operations. And so, I'm going to
23 recommend, and I think other leaders from communities in the
24 Arctic will also recommend, that the Agency include a component
25 that has a person. It'll be a person, probably a person who has

1 experience like all leadership comes here -- comes first from
2 whaling. I have to believe it'll be leaders here, our leaders
3 in the whaling context first. Whaling first, and possibly
4 somebody who was also an MMO, worked in the industry, the oil
5 and gas industry. Regulated the oil and gas industry for the
6 Borough, or some other massive expertise that adds to this new
7 regulatory component that will restore public trust.

8 Restoring public trust in the Arctic is going to mean
9 doing those kinds of things that I can't do. I didn't grow up
10 here. I don't know about whaling. I can read about it. I can
11 talk to you about it. But I've never done it and I won't do it.
12 You do it. I'm not allowed. So it will have to be somebody
13 with that kind of expertise. And that might restore public
14 trust. Who knows, it might even restore your trust, I don't
15 know. We can hope. I can recommend, hard, as hard as I can to
16 these people who are in Washington D.C. Their lawyers, they
17 know nothing about this. So they'll listen to us. And a lot of
18 what I have to say comes from people in meetings like this. The
19 Lord knows all of my good ideas just get me out of the good
20 schools.

21 So that's where we're going as an Agency. And I think
22 this new regulatory Agency will be created as soon as -- just in
23 a few months, there'll be an announcement of a new Bureau of
24 Safety and Environmental Enforcement.

25 We want to take public comments this evening, comments

1 primarily on the draft Supplemental EIS prepared to address the
2 Court remand. John do you have comments?
3 MR. HOPSON: No.
4 MR. LOMAN: No -- thank you.
5 MR. HOPSON: Not yet.
6 MR. LOMAN: Okay. Let me know when you're ready. So I'm
7 going to turn it over to you all, and hear what you have to say.
8 Hear what's on your mind. Also, we have coffee and cookies,
9 quite a few cookies, so please feel free to help yourself.
10 UNIDENTIFIED MALE: So who's here representing the State -
11 - nobody? It's all feds here? All feds, huh?
12 MR. LOMAN: All from the three mile limit out to the 200
13 mile limit. But we do work with the State. Matter of fact,
14 we're working with the State collectively on developing a
15 process to do health impact assessments in conjunction with our
16 NEPA evaluations.
17 UNIDENTIFIED MALE: You need to ask them to step up there
18 so the Reporter --.
19 MR. LOMAN: Well it would be ideal.
20 REPORTER: If they're going to talk, they need to tell me
21 their name and spell it.
22 UNIDENTIFIED MALE: Do I need to come say what I said
23 earlier in the comments?
24 MR. LOMAN: No, no, no. If you've said it already, we have
25 it down. If there's additional -- people don't like to talk so

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1 you have to encourage. Help me with this if you can. Encourage
2 people to come forward and say what's on their mind.
3 UNIDENTIFIED MALE: I don't even know the times that we
4 got.
5 MR. LOMAN: The draft Supplemental EIS? Well given all of
6 our environmental documents that we've produced, it's two
7 things. Easy to read because it's written in plain English.
8 And it's short, probably the smallest environmental document
9 we've produce just about, you know. Yes sir?
10 UNIDENTIFIED MALE: Are those the three, there's only 40
11 max (indiscernible), I believe in your EIS?
12 REPORTER: Can we get his name?
13 MR. LOMAN: I'm sorry?
14 UNIDENTIFIED MALE: The three concerns the Court gave you
15 -- are those the only three that you're looking at?
16 MR. LOMAN: Yes.
17 UNIDENTIFIED MALE: To fulfill your EIS?
18 MR. LOMAN: Yes. The impetus for preparing this
19 Supplemental Environmental Impact Statement is the Court remand,
20 and those three things that the Court said we needed to address.
21 UNIDENTIFIED MALE: Okay, (indiscernible).
22 MR. LOMAN: Hasn't been -- hasn't been submitted to the
23 court yet. Because the National Environmental Policy Act, in
24 addition to saying you must address the affects to the human
25 environment when you're taking a major Federal action like in

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1 oil and gas lease sale, like we did in 193. Its other component
2 is to be transparent, open. It's a Sunshine Law, let the public
3 know. And then the other thing is, let the public and other
4 stakeholders, government Agencies that are interested, et
5 cetera, provide input to us, the Agency that's doing it. That's
6 why we're here tonight.
7 MR. PETERSON: But I think your question was, the Judge
8 read the original and --.
9 UNIDENTIFIED MALE: Yeah.
10 MR. PETERSON: -- and accepted everything in the original,
11 except these three issues.
12 UNIDENTIFIED MALE: Yeah.
13 MR. PETERSON: So he did. He found the other ones treated
14 the requirements thoroughly. So it's just these three that he
15 had an issue with.
16 UNIDENTIFIED MALE: Thank you.
17 MR. LOMAN: Yes sir? Our reporter will want to know who
18 you are.
19 MR. HOWARD PATKOGAK: I'm Howard Patkogak with the Hoonah
20 Corporation.
21 MR. LOMAN: Howard.
22 MR. PATKOGAK: I have a question on page 10 -- in this --
23 explain fourth paragraph. I need an explanation about that
24 first sentence with BOEM. What do you call a reasoned --
25 reasoned choice -- explain that.

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1 MR. LOMAN: A reasoned choice? That it's reasonable.
2 Reasonable is something that is not far-fetched. It's
3 obtainable. It's possible. It's likely to happen.
4 MR. PATKOGAK: Thank you.
5 MR. ROUTHIER: And that that language is taken from that
6 Federal regulation that we discussed before, that 1502.22.
7 That's directly taken from the regulation.
8 UNIDENTIFIED MALE: You had a comment? You got a
9 microphone on?
10 MR. LOMAN: We have a microphone right in that thing right
11 there.
12 REPORTER: Could you state your name, please?
13 MR. OKTOLLIK: Thank you very much. My name is Sean (ph)
14 Enoch Oktollik, City Mayor of Wainwright. And my comment for
15 tonight is November 4, 2010 to the Regional Director Alaska OES
16 (sic) Bureau -- Bureau of Ocean Energy Management Regulation and
17 Enforcement. And your address. Wainwright, Alaska Public
18 Hearing today -- Chukchi Sea Draft SEIS, Lease Sale 193.
19 Today's date, November 4, 2010.
20 The Director: As Mayor of Wainwright, I would like to
21 thank you for this opportunity to give our thoughts about
22 oil and gas activities in the Chukchi Sea. As the community
23 that stands to be impacted the most by activities in the Region,
24 we are paying close attention to a wide range of economic and
25 environmental issues. I had the pleasure of sharing these

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1 issues with the Director Michael Bromwich, Tom Beaudreau and
2 John Groll here in Wainwright on October 27th. At that time, I
3 told him that the City supports a balanced approach of
4 exploration in the Chukchi Sea. That support is shown in a
5 Resolution we passed, adopted this year. I have a copy of the
6 Resolution for you that we would like put into the record.

7 By a balanced approach, we mean one that provides jobs and
8 business opportunities, but does not impact our subsistence
9 lifestyle. This balance is important to us because, while much
10 of our traditional food comes for the sea. In today's economy
11 we must also rely on jobs to pay the bills for the modern
12 services we have here.

13 One of those modern services is electric power. Today our
14 electricity is provided by diesel generators. The potential of
15 natural gas from our own backyard to power these generators
16 would be beneficial to us in two ways. It would provide us with
17 a consistent and less costly fuel. And it would help reduce the
18 greenhouse emissions burning diesel fuel products. This is an
19 advantage our neighbors in the village of Nuiqsut enjoys, thanks
20 to gas produced in the Alpine Oil Fields.

21 In a remote village like Wainwright, the number of jobs is
22 limited. This is why we support careful exploration in the
23 Chukchi. Because our community is so close to the exploration
24 area, we have an opportunity to create long-term jobs. That is
25 why we join the Olgoonik Corporation in support of exploration.

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1 As the primary landowner and for profit organization in it will
2 be through their efforts that development will take place. That
3 is why we have identified Olgoonik Corporation as the point of
4 contact for local hire and their subsidiaries as preferred
5 contractors for operations on property owned or controlled by
6 the Corporation.

7 For Wainwright, to take advantage of this economic
8 benefits of oil and gas development in the Chukchi Sea, we urge
9 that exploration activity be approved and not delayed any
10 further. Thank you for this opportunity to provide you with our
11 comments.

12 Respectfully, Enoch Oktollik, Mayor of City of Wainwright.
13 I don't have Resolution right now, but I'll give it to you guys.
14 How long will you be here?

15 MR. LOMAN: Well we're going to Barrow tomorrow morning.
16 But we actually, I believe, have the resolution already.

17 MR. OKTOLLIK: All right.

18 MR. LOMAN: If you -- and we will submit as part of the
19 record. We will take comments until November the 29th if you
20 want to be double sure you can always just email them. Email
21 the resolution to us.

22 MR. OKTOLLIK: All right.

23 MR. LOMAN: And we will submit it, as part of the record.
24 We will take comments until November 29th, if you want to be
25 double sure, you can always just email them. Email the

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1 Resolution to us. And we'll make it part of the record.

2 MR. OKTOLLIK: All right. And, I'll leave you a copy in
3 here and I never write a cc copy to the City of Wainwright.
4 Maybe I could write it down first before I turn it over to you?

5 MR. LOMAN: Sure.

6 MR. OKTOLLIK: We got the copy in Wainwright.

7 MR. LOMAN: Thank you very much for your comments and the
8 Resolution Mr. Mayor. We appreciate that.

9 MR. OKTOLLIK: Thank you for the opportunity to testify
10 tonight.

11 MR. LOMAN: Thank you Mr. Mayor. We need that note for
12 the record.

13 MS. MAYER: Good evening. For the record, Lucille Mayer.
14 Thank you for coming to Wainwright to hear our testimonies this
15 evening. And I'm sure there'll be others that will submit
16 testimonies or their comments to you by the 27th of this month.

17 My name is Lucille Mayer. I am a member of the Board of
18 Directors of Olgoonik Corporation, the Village Corporation of
19 Wainwright, Alaska. The Olgoonik Corporation was formed in 1973
20 by the Alaska Native Claims Settlement Act. In 1999 we formed
21 Olgoonik Development to create and manage for profit,
22 subsidiaries in government contracting.

23 During the past nine years, Olgoonik Development and its
24 growing number of successful subsidiaries have assembled a
25 record of proven performance in the area of construction

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1 management, facility operation support services, design/build
2 services, logistics support, environmental remediation services
3 and technical security. While this growth has brought financial
4 and educational benefits to the community, the great majority of
5 the jobs created are outside of Alaska.

6 However, the Federal government's focus on reducing
7 reliance on contractors makes it necessary for the Olgoonik
8 Corporation to seek opportunities outside of the Federal market
9 place. For that reason, we made the strategic decision several
10 years ago to diversify into commercial operations. One of our
11 key business targets was the oil industry in Alaska. In advance
12 of potential exploration in the Chukchi Sea, we began investing
13 in the infrastructure and technology needed to support oil
14 company operations on the North Slope.

15 Our working relationship with the industry in the Chukchi
16 started in 2007. This was the year we began providing Marine
17 Mammal Observers, as well as crew change and supply support for
18 companies conducting science studies in the Region. This
19 support has grown over the past two seasons and made it
20 possible, train and hire local residents for several seasonal
21 jobs. During the past four years Olgoonik has invested in
22 excess of \$5.5 million developing and upgrading infrastructure -
23 - purchasing equipment and preparing residents for working with
24 the oil industry.

25 We have built good relationships with the companies who

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1 have leases in the Chukchi. We have worked together to develop
2 the groundwork for important economic growth. In the forefront
3 of these efforts is our focus on what Mayor Oktollik described
4 as balanced growth between economic and subsistence issues. The
5 jobs and economic development that will come from exploration in
6 the Chukchi Sea is important to the Olgoonik Corporation and the
7 people of Wainwright. We are confident that exploration can be
8 done in a manner that protects our subsistence traditions. Our
9 Board has passed a resolution in this regard. And we present a
10 copy for inclusion in the public record. Thank you for your
11 time. And I will be happy to answer any questions you may have.

12 MR. LOMAN: Thank you very much.

13 MS. MAYER: Un-huh (affirmative).

14 MR. TERRY TAGAROOK: Good evening. And before I start, my
15 cell phone accidentally pressed a number. And do you know who
16 that person was?

17 UNIDENTIFIED MALE: Your mom?

18 MR. TAGAROOK: No, Marie Tracey. And she send her
19 greetings to all of you. I know she -- you met with them
20 yesterday. Anyway, I'm glad you guys are here and speaking to
21 us about this, even though it might be on a short notice.

22 My name is Terry Tagarook. I am speaking today as a
23 member of the Wainwright Tribal Council. The Council also
24 believes we can achieve a balanced approach between our
25 traditional subsistence lifestyle. This is important because we

1 no longer function in an isolated barter economy or rely totally
2 on subsistence as our ancestors did.

3 But subsistence remains an important part of our way of
4 life. The Arctic Ocean subsistence resources not only feed us,
5 but are fundamental to our identities as Native Alaskans. While
6 these waters provide many of our basic food, it is important to
7 consider the fact that we also must rely on local jobs in
8 addition to subsistence.

9 Our households are caught in a changing world. We hold
10 strongly to traditional Inupiaq values, but must also adapt to
11 the reality of living in a cash based society. The limited
12 number of jobs available in the Village is found in public
13 services provided by the North Slope Borough, the City and the
14 Olgoonik Corporation. In the past, this has meant that many of
15 our young people have had to leave the Village to find work.

16 For that reason, we see oil operations in the Arctic Ocean
17 as one of the most important opportunities we have for
18 developing a local economy that could grow and support future
19 generations. We understand that exploration and development
20 activities in the area will bring challenges. By speaking with
21 us about our concerns and taking advantage of our traditional
22 knowledge, these challenges can be overcome.

23 We believe that our traditional way of life can be
24 balanced with responsible and environmentally safe oil and gas
25 development. We urge you to move forward with approval for

1 drilling in the Chukchi.

2 Like the City of Wainwright and the Olgoonik Corporation,
3 the Council has passed a Resolution supporting exploration in
4 the Chukchi. And I request that this document be added to the
5 record of this public hearing. Respectfully, Terry Tagarook,
6 Tribal Council, Wainwright, Alaska.

7 And I believe you have that copy of the Resolution.

8 MR. LOMAN: Thank you.

9 MR. TAGAROOK: Thank you.

10 MR. HOPSON: My turn?

11 MR. LOMAN: Always.

12 MR. HOPSON: Always, huh? John Hopson, for the record.
13 Good evening. I'm going to speak on behalf of the Whaling
14 Captains because our President is not here today.

15 My name is John Hopson, Jr. As one of the Whaling
16 Captains in Wainwright, I would like to thank your Agency for
17 this opportunity for us to express our opinion regarding oil and
18 gas in the Chukchi Sea.

19 Every whaler in our group is committed to support the
20 subsistence lifestyle in Wainwright. That is why we have paid
21 close attention the plans to explore for oil off our coast. We
22 understand that these activities can bring new jobs to
23 Wainwright. Those jobs are important, because every Captain
24 knows that it takes money to support subsistence whaling. We
25 need to pay for gas, supplies and equipment. That money comes

1 from local jobs.

2 For some time now, the Whaling Captains have supported
3 Olgoonik Corporation's effort in the oil industry. They have
4 been active in making certain the oil industry understands the
5 importance of whaling and other subsistence hunts. They have
6 led the discussion of what can be done to balance exploration
7 with our traditional lifestyles, our concern for the environment
8 and our need for local jobs.

9 As an example of this effort, Olgoonik runs a
10 Communication Center during the summer season to make certain
11 offshore science operations do not interfere with whaling. The
12 company also operates a small boat that supports the Science
13 Program. This fall they've used that vessel to help tow in that
14 whale, which was Wainwright's first fall whale.

15 We appreciate this leadership and join the Olgoonik
16 Corporation, the City of Wainwright and the Tribal Council in
17 their support for the Chukchi oil exploration that is done in a
18 safe and respectful manner. Thank you.

19 I've also got a copy of a letter dated January 7, 2010,
20 addressed to June Childress, our President of Olgoonik
21 Corporation from Walter Nayakik, Jr. our president of the
22 Wainwright Whaling Captains.

23 MR. LOMAN: Thank you very much.

24 MR. HOPSON: Thank you. I just want to ask this question.
25 It's probably the only community that has statements of this

1 sort, that pretty much supports the working relationship with
2 oil companies and the Federal government. One, because we
3 understand whether we fight you or not, oil exploration will
4 continue. So we've taken a proactive stance to work with the
5 industry and the Federal government to help balance the issues
6 and not fight in court.

7 What questions does the Federal government have of us in
8 that sort, or the State government for that matter?

9 MR. LOMAN: Well I don't know if I can speak for all of
10 the Federal government, but you are correct that -- and there is
11 a subtle difference. Wainwright and the statements that are
12 being presented tonight aren't the only statements that are
13 supportive of responsible exploration and subsequent
14 development. There's a fear. And it's understandable to me,
15 and I think to everyone in the Federal government, of a major
16 oil spill.

17 This spill that occurred in the Gulf of Mexico on April
18 20th -- because I work in Alaska. I've never worked in the Gulf
19 region. I've only worked for this Agency in Alaska. I will
20 only work for this Agency in Alaska. I came to this Agency
21 because, one, I wanted to live in Alaska first. And, so I said
22 to myself, what would I do and what would my colleagues do had
23 that occurred in the Arctic? But for that spill, Shell may have
24 conducted exploration activities in the Arctic. It was likely
25 that they would have. And I think that -- I know I would be

1 devastated, personal responsibility. I would take personal
2 responsibility for it because I am part of the senior leadership
3 in our organization. And I work closely with the managers that
4 would be overseeing the regulatory aspect of any drilling
5 operations. Ours would be -- our inspector, at least one, would
6 be there 24 hours a day during that exploration. But that's,
7 you know, what didn't happen.

8 What did happen is, this week we took statements and
9 listened to comments starting in Kotzebue, Point Hope, Point Lay
10 and now here. And then we continue to Barrow and then
11 Anchorage. And people say -- say this -- almost everywhere more
12 and more in the communities, that exploration and development is
13 inevitable. So if it's going to happen, then we demand certain
14 things. What is being demanded is pretty consistent, probably
15 consistent with your expectations. I think you have
16 expectations that's different than demands. But what gets done
17 is the same, stay out of the way of whaling. Don't interfere
18 with whaling and disrupt it like Shell did, by their own
19 admission, in 1985.

20 Shell admits to that. One time one of their leaders said
21 they were going to apologize for it. I hope they did. But it's
22 not my job to make people apologize. It's my job to regulate
23 that industry in a way so that they never have to apologize.
24 Because in our mind, this is not an experiment with respect to
25 regulating industry so they don't disrupt subsistence activities

1 and other culturally self-defining activities. It has to be
2 done and it can be done. We know it can be done. The Deepwater
3 Horizon spill, Exxon Valdez -- those are incidents that didn't
4 have to happen. They shouldn't have happened. And they didn't
5 have to happen.

6 One man could have made a turn and avoided, on time or
7 even close to on time, and avoided the Exxon-Valdez spill. One
8 turn, one course change, and it didn't happen. That's how
9 simple it is to avoid it. Given that, I say it doesn't have to
10 happen. The reason it happens, in my mind, and this is just me,
11 it's not about the Federal government, my Agency. It's because
12 people get too comfortable, so comfortable they don't get enough
13 sleep or don't stay awake when you have to. That comfort comes
14 through a lot of things. It comes through an industry that
15 says, we've got a wonderful safety record. It comes from a
16 regulatory Agency that says, we've got a wonderful safety
17 record. And they pat themselves on the back. And they get more
18 comfortable. Pretty soon they're asleep when they need to turn.

19 Safety environmental responsibility is accomplished
20 through endless demonstration. You don't need to talk about it
21 and brag about it. And, hopefully, the industry -- hopefully
22 the industry will start realizing that. In the frontier areas,
23 they won't make a dime unless they realize it. Despite what
24 they write in the magazines and say on TV, and even our highest
25 elected official and the person I ultimately serve, say -- we

1 have told industry that loud and clear. We had a conference in
2 March, oil platforms on photos that the Coast Guard put up.
3 Great, clear, sunny days and they're on fire and toppling over
4 in calm waters. And we've said, this industry has to avoid that
5 or you will never have a production platform in these frontier
6 areas like the Arctic.

7 And the room gets silent. I don't mean to rain on
8 people's parade. If there wasn't any exploration after the
9 Deepwater Horizon incident, and it's not going to make it any
10 easier. One thing it will do, is it will make it safer because
11 the regulatory Agency will do a better job. And hopefully
12 industry will at least get one huge giant step forward to
13 endless demonstration of safety and environmental
14 responsibility. It can be done safely. It can be done
15 responsibly. And it can be done in a way that treats what every
16 political appointee and elected official that I've seen in my
17 entire Federal service wants. They want to treat Native people
18 like our national treasure instead of the poster child for the
19 National Trash Campaign. They want to do it. And that's a good
20 starting point, because when you really want to do it, you'll
21 probably do the right thing. Probably. I'm with them on that.

22 MR. AGNASAGGA: For the record, Ransom Agnasagga,
23 Alternate Commissioner Alaska Eskimo Whaling Commission. Yeah,
24 I was not made aware of this meeting, you know, and I'm on the
25 AWC. I'm an Alternate Commissioner. I don't see Roscoe in

1 here, you know, he's our Commissioner, you know. I don't know
2 what kind of information he's got, if he's even seen this, you
3 know, because I haven't seen it, you know.

4 Just listening to what everybody said, our Directors, you
5 know -- our guess our corporate leaders, you know, they said it
6 all. You know, even in the Bible it says all traditions will
7 come to pass, you know. Eventually everything that we do now,
8 you know, it's not going to be done 30 years from now, 40 years
9 from now. We understand that. And I guess not even really
10 reading it, I'm going to have to stand behind them too and
11 support it. But I was not made aware of this meeting until I
12 saw it on the billboards around town. And I didn't know what to
13 expect, you know. But I'm glad John stood up for the Wainwright
14 Whaling Captains Association, you know, and I hope that the OC
15 will continue to support -- I hope, you know, this fall whaling
16 season.

17 I mean when I was for a discount on gas, you know, because
18 I didn't want to be considered a special interest group, you
19 know. What I heard from one of the meetings -- that kind of
20 hurt, you know, so that just shows where our traditions are
21 going, you know. It's corporate -- it's all about money.

22 I just want to make the comment that I hope it's done like
23 they say, responsibly, safely and with the future in mind, you
24 know. Because when the oil and gas is gone, there goes the
25 money with it. And what's left is what we're going to leave our

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1 grandchildren, you know. And I just hope that it's done
2 responsibly and safely. I guess I have to stand behind
3 everybody else here in Wainwright or else I'll be the black
4 sheep. Go do it.

5 MR. LOMAN: Thank you.

6 MR. AGNASAGGA: I wasn't able to draft a letter to, you
7 know. I wasn't made aware of it until --.

8 UNIDENTIFIED MALE: You still got time.

9 MR. LOMAN: Thank you.

10 MR. HOWARD PATKOGAK: For the record, I'm Howard Patkogak.
11 I'm the Cully Corporation Chairman. To me, as a whole, I've got
12 to think about not just me, not just my neighbor, but the whole
13 community. You know, I grew up watching our traditional whaling
14 subsistence, before all the electric stuff came around. You
15 know, I got to see part of that. I share Ransom's uncertainty
16 of these fears.

17 I have the same fears, you know, but I go out hunting out
18 there too. At the same time, you know, we're all dependent on
19 the oil that directly benefiting us for the past -- since the
20 70s, right?

21 MR. AGNASAGGA: (Indiscernible) They ain't going to come
22 out.

23 MR. PATKOGAK: Yeah, I share your fears. At the same time
24 I don't believe in living in fear. We as Native people, we're
25 strong willed. But at the same time, we have to deal with

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1 what's going on around us. We can't stick our heads in the
2 sand. It benefits us. At the same time, I'd like to ask a
3 careful, balanced approach. And I'm in agreement with the City
4 and the Tribal. That's what I wanted to say. I don't have
5 anything else besides that. Thank you.

6 MR. LOMAN: Thank you very much sir.

7 MR. HOPSON: It got quiet.

8 MR. LOMAN: John I guess I would ask -- you asked it
9 earlier -- you had a question. Does your vision see a way to
10 explore, produce if there is an economically viable resource
11 benefit in a way that's positive through jobs and economics and
12 maintain the culturally self-defining part of the people of
13 these communities?

14 MR. HOPSON: I knew that was coming.

15 MR. LOMAN: Way down the road?

16 MR. HOPSON: Again, for the record, this is John Hopson.
17 You can hear me okay. Okay. Yes. If we -- when we listen to
18 the Native Village of Point Hope and ICAS and AWC when they file
19 for these lawsuits or join in each other's lawsuits, they talk
20 about the potential for losing our culture, our traditions and
21 our subsistence.

22 I imagine that we will lose them faster if we don't
23 develop our communities in a positive manner, by creating jobs.
24 I've never been in a skin boat. My parents have. I've never
25 driven a dog team. My parents have. At the time I was born and

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1 raised, we had snow machines, aluminum boats and outboards. So
2 I could not tell anybody here how to do it. I don't know how.
3 I need to learn how. But because of the way I was brought up, I
4 need money to buy a new outboard. I need money to buy gas. I
5 need money to buy food for these trips that we take.

6 I believe we will lose our subsistence way of life faster
7 if we don't find a way to supply jobs. Because these kids had
8 not -- did a skin boat or drive a dog team nor -- it will be
9 pretty hard to learn how, with the mindset we have today. So I
10 need the money to continue this. I could not go whaling if I
11 didn't have money. I spent a lot of time up the river in the
12 summertime. And I couldn't do it without money, because I have
13 to buy gas and diesel to heat my cabin, to drive my boat. I
14 have to buy guns. I have to buy bullets to shoot these animals.

15 The Native village of Point Hope, ICAS or AWC is not
16 willing to buy me any of those items. Nor can they afford it
17 for every hunter on the Slope for their actions that they're
18 dealing with. They are stopping us from developing these
19 opportunities for the people today. More and more kids are
20 graduating from high school, but where do they go? They go to
21 college and they can't come back because there's no jobs. They
22 go to training. They can't come back. There's no jobs. So
23 they go live in a city. Then they lose their culture and their
24 traditions and their subsistence if they don't get the chance to
25 come back.

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1 That's where I see this helping us in a positive manner.
2 The potential for an oil spill, I believe, and I'm not an
3 expert, is low. Based on the knowledge we've learned, and the
4 education we've gotten from the industry over the past five
5 years. I was probably the most vocal person against oil and gas
6 when Shell first came up here again in '05 to tell us they were
7 going to go develop. But because of the education that I've
8 received from them and the trips that I've taken around the
9 world -- polluting Norway and seeing operations of not just
10 Shell but Conoco and Standard Oil, made me believe we can do
11 this.

12 Our oceans are no more than 170 feet deep where they plan
13 on developing or exploring. The Deepwater Horizon was in a mile
14 of water, 5,000 feet of water, which is very hard to get to when
15 there's a catastrophe below. Ours is just a matter of hours
16 before we can get to it, not days or weeks or months like they
17 had. So I think we can get this done in a positive manner. But
18 that fear of an oil spill is still there.

19 But I have to find a way to buy these items so I can
20 continue our subsistence. We take kids out to our cabin that
21 when -- some kids that don't have family that goes up the river
22 -- we get to expose them to our traditions over a time period.
23 So I get that opportunity because of the job that I have. Now
24 it provides me money to buy this stuff. So it's a positive move
25 forward if we can get them to explore and develop.

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1 Our schools are top notch. Our water and sewer is top
2 notch. Our Fire Departments are top notch. Our Public Works is
3 becoming top notch because the North Slope Borough has the
4 taxing authority to provide that. But because of the aging
5 facilities in Prudhoe, the money is at a status quo practically,
6 the taxation. So we can't build any more than what we already
7 have.

8 Yet our populations throughout the North Slope is growing.
9 It's not declining. So we got to think where are we going to
10 build our next school when we become over-populated? Where are
11 we going to build our next hospitable if we need one in a larger
12 community? We're going to need more fire trucks. We're going
13 to need another ambulance. We're going to need more police
14 departments. We're going to need more teachers. But the way
15 that the taxing is going, the properties at -- decline the
16 property tax by the status quo.

17 So we can't provide that unless we create more
18 infrastructure, building a pipeline, building infrastructure,
19 hotels. You know, support facilities for offshore oil. Is our
20 -- basically our only hope for the next 20 to 30 years when you
21 look at what is going to happen to us, if everybody just walks
22 away and does nothing. If the oil companies decide not to
23 develop, we have nothing. We're going to be stuck with what we
24 have today and try to come up with new ideas on how the world
25 will be able to provide the services that it's mandated.

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1 So it is a positive move forward. You know I just -- I've
2 said this in numerous meetings. And you've heard me over and
3 over. We need this to happen because of this reason. ICAS,
4 Native Village of Point Hope, AWC executives, don't come to our
5 communities and tell us why they're doing this or when they're
6 going to do their lawsuits. You know, they don't get our
7 blessings. We may have members in some of those organizations,
8 but it's just a one member on a Board. And they don't come down
9 here and ask us for our opinions as to whether we want to do
10 this or not, whether we should get into a lawsuit or not over
11 oil and gas.

12 So they're not really representing, like ICAS says -- they
13 represent all of the Inupiat. I don't see that happening. I
14 don't see it working. It's an organization that just has a
15 mindset of no oil and gas whatsoever. And we have a problem
16 with that. I have a personal problem with that. And I've
17 expressed my concerns to George Edwardson. He is the President
18 of ICAS. But he won't listen to me. He won't even look at me
19 when I want to talk about oil and gas with him. He's a -- in my
20 opinion, a one eyed jerk. He's my uncle, for crying out loud,
21 but I have to call him that because he won't listen to me. He
22 won't reason with me. He just does not want to reason. And
23 he's the Executive CEO of ICAS. Yet he's supposed to represent
24 us all, 10,000 people. But he won't. Thank you.

25 MR. LOMAN: Thank you. It's the other question I have.

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1 Oh, go ahead sir.

2 MR. AGNASAGGA: For the record, Ransom Agnasagga. I just
3 wanted to comment (indiscernible) ICAS, AWC. The reason AWC is
4 included in the lawsuit is because it was formed under ICAS and
5 that's what I -- if I remember right, we were the leading
6 support of trying to get behind that lawsuit during the meetings
7 in February.

8 MR. LOMAN: The other question I have for everybody here
9 is -- at least inasmuch as what has happened, and these are
10 offshore activities -- offshore activities that we are
11 responsible for overseeing, facilitating, not promoting,
12 facilitating. Here in Wainwright, there's been some activities
13 that demonstrate that maybe there's the desire for integration
14 of the industry -- outside workers.

15 Prudhoe Bay has segregation. Is integration of outside
16 workers a concern for people in Wainwright?

17 UNIDENTIFIED MALE: I don't know, look at me.

18 MR. HOPSON: I think in my opinion we -- if I have local
19 trained people to do the job safely, ready to go, which we don't
20 have, because we haven't really gotten the population out there.
21 But if I had it in my hands here, saying we have these people
22 that can do the jobs, and the oil companies are not hiring us,
23 then we have a problem. But the way things are going, I think
24 integration is happening and I think it's working well, in my
25 opinion.

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1 MR. LOMAN: Mr. Mayor.
2 MR. OKTOLLIK: Enoch Oktollik again, for the record. Oil
3 and gas development in the Chukchi and the Beaufort Sea I see
4 that a place that we could benefit ourselves in our community.
5 So I heard it along the lines that, from reading history books
6 and whatnot of our United States and our Federal government,
7 about mistakes in there when it could benefit the Federal, when
8 it could benefit the State, when it could benefit private
9 sectors and benefit most everybody, when it's essential.
10 That is, where ever the impact is, it could benefit us
11 here in this small community in Wainwright. I believe it could
12 be beneficial to us all -- of what is this happening now in --
13 close to Wainwright. These are by the ocean or by the land, we
14 are getting to be impacted. And we haven't seen the full impact
15 of it yet.
16 We're going to be impacted whether into the future as
17 probably Northwest Fisheries Service will probably come to the
18 Arctic. And we'll probably see the northwest manifestation of
19 routes opening to the future in offshore tourism. We can see
20 this as a little, even though it's oil and gas -- pocket.
21 There's other things that we going to see that will impact our
22 Arctic Ocean.
23 We're going to see -- we haven't seen the impacts of
24 what's going to be happening through the Bering Sea and through
25 the Chukchi Sea of ship trafficking. How are we going -- how

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1 are we going to regulate trafficking from the Bering Sea, Bering
2 Straits into the Chukchi Sea? And how -- anyway when I heard
3 this gentleman here, I can't remember his name, they say this
4 essential way of running a pipeline and where it will be. And
5 through all those scenarios offshore, when development happens,
6 oil spill is essential.
7 Haven't seen where we could find funding -- relief funding
8 -- there are relief fundings -- what about in this Environmental
9 Impact Statement or the (indiscernible) that are impacted? I
10 would like to see these set in place. We have work -- we are
11 good with the NPRA from the City of Wainwright where we provide
12 almost over two jobs. And could we be able to work with the oil
13 companies and the Federal government in this State in providing
14 more programs like this?
15 Like I'll give you example how we get our NPRA funding and
16 what we provide -- we provide Boys and Girls Clubs. We provide
17 Elder programs. And also we operate our government of
18 operations and our recreations and others that we don't see
19 (indiscernible) funded to the North Slope Borough -- and
20 whatnot.
21 If we could set up a program of some sort with the oil
22 companies -- Outer Continental Shelf development of this
23 program, 30 years looks like a long ways and we could see for
24 probably -- like more jobs in our community.
25 But on the most strongest point I would probably see is

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1 some way for our own community, us over here and try to develop
2 relief -- oil spill relief fund from the oil company before it
3 starts its production. I think it would be essential, even
4 though the Eskimo Whaling Commission -- I've heard they asked
5 for \$20 million aside for our subsistence way of living or what
6 you call it (indiscernible) village, kind of a funding. We need
7 that kind of funding for our own community. Wainwright would be
8 very impacted and most of our, probably 30 percent of our
9 community relies of subsistence food. Some rely on store bought
10 food. Thank you very much.
11 MR. LOMAN: Thank you.
12 MR. AGNASAGGA: I just want to say, Ranson Agnasagga, was
13 saying something like mitigation matters for the -- mainly the
14 Wainwright community. I don't know what we can do for that -- a
15 band-aid over it, but you said you can't tell them what to do.
16 That's kind of like what I understand.
17 MR. LOMAN: Well there is a huge issue of -- it's one of
18 Mayor Itta's -- a Ocean Claims Initiatives and it involves
19 revenue sharing rather than sharing to the local level. That
20 can mean different things to different people. The biggest to
21 the local level to the ground zero level. Certainly Wainwright
22 community and The Native Village of Wainwright are at ground
23 zero. Ground zero, as in one of the communities that would be
24 most affected because of the proximity to the Chukchi Sea.
25 Revenue sharing is a very difficult one for us bureaucrats

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1 that work for a Federal agency. Because it's going to require
2 legislation. We don't have the authority to mandate it. But it
3 does exist in the Gulf of Mexico.
4 MR. HOPSON: You say that in a manner like, my opinion,
5 the Federal government doesn't want to deal with revenue sharing
6 yet. The amount of money and royalties that the Federal
7 government gets from the leases, the amount of money that the
8 Federal government will get from the sales and royalties, why
9 can't that be used as a part of the revenue sharing for the
10 impacted communities? I mean, you know, it's just common sense,
11 that's where it should come from. We all know the oil companies
12 are in it for the money. The Federal government is in it for
13 the money, as well. But if we -- it would make more sense if
14 the revenue sharing came from the Federal government's part of
15 its royalties. Or the State of Alaska, for that matter, when it
16 gets its royalties, you know. That might be the route to debate
17 rather than trying to find a way to make the oil companies come
18 up with a revenue sharing plan, which you can't even recommend.
19 MR. LOMAN: Well, in the case of the States in the Gulf of
20 Mexico it's the law and it goes to the State level. Senator
21 Begich has introduced some legislation. I know there's been
22 other legislation introduced that has gone nowhere.
23 MR. HOPSON: Because it was a bogus legislation.
24 MR. LOMAN: Well there's -- there are other people in
25 bodies such as the Senate, Senators. And their position is, the

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1 royalties from these resources should go to all the people
2 because they belong to all the people. So the other counter
3 argument is, is all the people don't suffer the kinds of
4 affects.
5 I come from the Upper Peninsula of Michigan on Lake
6 Superior. It's pretty safe to say that my culturally self-
7 defining practices on the Lonts (ph) Indian Reservation will not
8 be affected by offshore oil and gas activities in the Arctic.
9 So it's easy for me to understand why communities in the Arctic
10 are most affected and others are not. So he logic is easy.
11 As far as an Agency goes, we can give administrative
12 support to certain legislation. We can say certain things. It
13 would be pretty safe to say that the Administration, no matter
14 which Administration, can support that kind of legislation,
15 revenue sharing, because it will resolve conflicts and competing
16 interests that are stumbling blocks to getting anything done so
17 that the nation can sell and benefit from its resources. It's a
18 stumbling block.
19 And we'll see what happens there. It's going to require
20 legislation to get any kind of thing that resembles revenue
21 sharing over and above the Coastal Impact Assistance program
22 funding. Yes sir.
23 MR. PATKOTAK: I am Blair Patkotak for the record. Do I
24 have to go up there to the mic to speak?
25 MR. LOMAN: It's easier for the Reporter to hear you.

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1 REPORTER: There's a hum.
2 MR. LOMAN: There's a hum and there's a vent and it blocks
3 the sound.
4 MR. HOPSON: Next time you come you'll have the recorder
5 sitting in the audience so that the reporter can hear.
6 MR. PATKOTAK: For the record, my name is Blair Patkotak
7 and I'd like to say something from my heart. Because it's what
8 my dad wished. You know, that he wanted development to help our
9 people. So, from his heart to my heart, I'm happy for him to
10 say that. And thank you very much for coming. And my question
11 to you is, you said that you are in a reorganization -- you're
12 planning a reorg right? And there's another organization?
13 MR. LOMAN: They're planning it for us.
14 MR. PATKOTAK: Yeah. And you said that there is an
15 organization that's going to regulate the oil companies, right?
16 Would you pass that information on to them that, when you have
17 that reorg and that organization is set up, to please come into
18 the villages so that they can train us how to do what you guys
19 do. So that maybe we might even be able do what you guys do.
20 And thank you very much for coming down. And may God bless you.
21 My dad was -- considered a religious man but he had a
22 faith in the Lord Jesus Christ. So those that do pray, we need
23 to pray not just, you know, live in fear like my brother says --
24 he walked out the door. To live in fear is not what the word
25 says. I mean, what you speak can come to pass. You know, you

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1 afraid of oil spill, will come to pass. You will always have
2 oil spills, plane crashes, car crashes, what kind of disasters
3 that are out there. But we can minimize that. We are learning
4 right? But I'm sure that if we do our part in lifting them up,
5 it can be done successfully. And I hope that our grandchildren
6 will reap the benefits.
7 Hopefully, if I ever get married and have kids, then
8 become a grandfather. But I'd to say thank you very much and
9 may God bless you and all those that came and attended. I speak
10 this from my dad's heart. From a couple of years ago, I heard a
11 lot of no, no, no development and whatnot. To come to a meeting
12 like this is kind of -- brings to mind my dad what he wanted in
13 a way. And I thank you very much for taking the time to come
14 here and come back again.
15 MR. LOMAN: Thank you very much.
16 MR. PATKOTAK: Thank you.
17 MR. LOMAN: We appreciate it. I think. Yes sir.
18 MR. AGNASAGGA: One more comment, Ramsom Agnasagga. This
19 is just like the -- there ain't going to be no socio-economic,
20 what you call it?
21 MR. LOMAN: Socio-economic study?
22 MR. AGNASAGGA: Yeah, like impact like that?
23 MR. LOMAN: We have socio-economic studies specific to the
24 Chukchi Sea under way.
25 MR. AGNASAGGA: You do?

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1 MR. LOMAN: Yeah. Sharon has a list of our environmental
2 studies that --.
3 MR. AGNASAGGA: I was one of the people in the past, that
4 it said there's no baseline, you know. That's why they started
5 all that stuff, you know. Just wondering about that, too.
6 Because, the socio-economics of the North Slope and the people
7 in the villages, how it's going to impact, you know?
8 MR. HALLER: Right. In the EIS, the original EIS --
9 there's a socio-economic impact analysis and I know -- I used to
10 do some of that so I kind of know about that piece of it. And
11 it gets into the socio-cultural, the subsistence and then with
12 jobs.
13 MR. AGNASAGGA: And like I said, I haven't had a chance to
14 see that.
15 MR. HALLER: Yeah, well that --.
16 MR. AGNASAGGA: I wish I would have.
17 MR. HALLER: Right. The Chukchi EIS is a much bigger one
18 but the socio-economic, subsistence. But you always have to
19 keep up with the current, you know, because society is
20 constantly changing. And so we always having to revise them.
21 MR. HOPSON: We're hearing different leaders who have come
22 in and different opinions will come out.
23 MR. HALLER: The pendulum swings.
24 MR. OKTOLLIK: Enoch Oktollik. Did you -- I know that we
25 saw the bottom core studies -- on the Beaufort Sea from a

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1 company that did the bottom floor study. But, yet, we haven't
2 the baseline studies in our bottom sea studies in the --.
3 MR. HALLER: Right. Yeah, those are -- I'm not sure of
4 the exact status of those, but I know those are --.
5 MR. OKTOLLIK: And how could we get those studies?
6 MR. HALLER: Well Sharon --.
7 MR. HOPSON: We were a part of that. Our company was a
8 part of that study.
9 MR. HALLER: Yeah -- Sharon has a list of the studies and
10 then there's -- we have a website that has studies that are on-
11 going, as well as completed studies. And then, if you want more
12 information there's about eight or, what, ten people in our
13 Study Section. Hugh Williams is the Chief it. You know, if you
14 need more.
15 MR. HOPSON: Would these studies --.
16 MR. OKTOLLIK: Got a lot of group of them -- many of them
17 like Shell and them. Shell, Conoco and those others that's been
18 leading them -- studying on them.
19 MR. HALLER: Yes and this --
20 UNIDENTIFIED MALE: Their focus would be the bowhead whale
21 and it's slowly starting to go out into, like, other animals.
22 MR. HOPSON: We have copies of the studies. And they talk
23 about walrus and whale and seal and fish and krill, plankton,
24 the bottom, the shrimp, worms. We have all of that. They're
25 just trying to make it in plain English because about 80 percent

1 of the book I cannot understand and read it.
2 MR. HALLER: Yeah, way to -- .
3 MR. HOPSON: So I read it based on the pictures until we
4 get the down to earth type -- summary out of it. And that's
5 what we're waiting for. But we do have this -- the book is
6 about yea thick just on one season's project.
7 MR. HALLER: Yeah one.
8 MR. LOMAN: Mr. Mayor our new Community Liaison, Michael,
9 will be coming to the community soon. And, in addition to
10 working with the school, to kind of have some interaction
11 between our scientists and the students, expose them to some
12 outside -- positive outside influence that is part and parcel to
13 their environment here.
14 Our environmental studies people can come with that effort
15 and present information, especially those studies in the Chukchi
16 Sea that are being finalized or where data's coming up, and
17 provide information to you by talking, oral communication, in
18 some pretty substantial detail. It is not true when you read
19 that the government knows more about the planet Venus than the
20 Chukchi Sea, no matter how many times they say it
21 MR. OKTOLLIK: What about the sea collection data from the
22 bottom floor and the offshore studies of the bottom sediments of
23 the (indiscernible).
24 MR. LOMAN: What we do know is that the Arctic Ocean, and
25 the Chukchi Sea certainly included, has a breathtaking amount of

1 diverse living organisms that support a complex ecosystem that
2 is beyond the imagination of most. From one respect, I know
3 that every whaler knows it, because it's the same ocean that
4 supports those whales, an extremely complex and sophisticated
5 animal, some of which were swimming -- or are swimming out there
6 now and were swimming when Abraham Lincoln was President.
7 MR. OKTOLLIK: Most of us were (indiscernible) many has
8 two, North Slope Borough, Fish and Wildlife. How many members?
9 MR. AGNASAGGA: No, I don't.
10 MR. OKTOLLIK: Offshore, Walrus becomes a member and
11 Whaling Commission and certain, the Borough Commission. And
12 sometimes, when you understand it in the Arctic Ocean, we've got
13 so many endangered species. There would be a number of
14 endangered species out there. As we're talking right now, how
15 many -- some of them need to be added on to the Endangered
16 Species list into the Arctic.
17 What, versus Endangered Species and the ones that are
18 coming into the listing, versus oil industry -- what does it
19 mean? Maybe somebody --.
20 MR. LOMAN: Mary can answer that question better than I
21 can.
22 MS. CODY: Once they're listed under the Endangered
23 Species Act, any action that the oil company wants to take, they
24 have to consult with the Agency that's responsible for that
25 species. So, like for the polar bear, that's Fish & Wildlife

1 Service. And when they give us a plan for what they plan on
2 doing, the oil companies also have to give that plan to Fish &
3 Wildlife Service. And Fish & Wildlife Service reviews it. And
4 for bowhead it's NIMS (ph).
5 And if there are things in that plan that Fish & Wildlife
6 Service or NIMS (ph) think are incompatible with maintaining
7 these species, they have the option to just say, no you can't do
8 it. You can do it this way instead. Usually it's an iterative
9 (ph) process that goes back and forth, sometimes for months.
10 And companies having a specific plan and the Agency that's
11 responsible for that species, helping them come up with a plan
12 that they can do what it is they want to do without additional
13 harm to a species that may already be in decline. It's a very
14 strong law.
15 MR. HOPSON: Leads to another question and it's going to
16 affect oil and gas. Why is it that the Federal government
17 doesn't go consult with the people who live with these animals
18 before they're listed? We don't see our comments in -- when
19 they say they come and they say they're going to consider our
20 comments and concerns and list them, we don't see those in the
21 Register. We don't see our comments.
22 We all opposed the Federal government in listing the polar
23 bears as a threatened species. But nobody took that serious
24 consideration. And it was a move to screw up oil and gas, in my
25 opinion by the Democratic people of America. No right

1 Republican in their right mind would do that thing. We're not
2 that dumb. But the Federal government never did come and
3 seriously take our consideration and why we were telling them,
4 it's not a threatened species. We've seen these animals die of
5 drowning. We've seen these animals die from themselves. When
6 they fight each other, they kill each other. They eat each
7 other. The only reason that it became a national political
8 issue is because Shell was out there exploring, doing seismic
9 activity and some guy took one picture of a dead polar bear and
10 we see it every year all the time.

11 Take for instance, the walrus, the last year's instance
12 where the Federal government said we had four hundred dead
13 walrus on our beach. And there was only ten. And they blamed
14 the oil companies. The oil companies are 70 miles offshore and
15 these walruses died on the beaches. They come here and Icy
16 Cape. You know, it's crazy. Now they want to list -- now
17 they're thinking of listing the walrus as a threatened or
18 Endangered Species because there's no ice, you know.

19 The animals move. Go to the Russian side and count them.
20 They're thousands of them, you know. Watch their pictures.
21 It's just crazy that the Federal government can come here and
22 tell us, this is going to happen whether you like it or not.
23 And then come back to us and say, oh we made a mistake. We're
24 sorry. It's not right, you know. It's just not right. And our
25 taxpayers pay for that, you know.

1 And it affects oil and gas in a big, big way when it comes
2 to threatened or Endangered Species. When the Marine Mammal
3 Protection Act was created, they said the bowhead was going to
4 be listed as Endangered until its population reached 10,000 or
5 more. Well it reached that population number, about four years,
6 five years ago. And we're still on the Endangered Species list.
7 Nobody's listening to us.

8 IWC knows our numbers. They take our numbers and they're
9 credible. But our own Federal government won't take it. You
10 know, it's crazy. And it affects oil and gas and what they want
11 to do, when they can do it, and when they can't do it, you know.

12 The only thing that should determine what the oil and gas
13 can do and can't do is the ice movement. That's what should
14 dictate what they can and can't do. So that they can do it in a
15 safe, sound manner. Animals get deflected. They will. We
16 deflect them ourselves, you know. We can deflect a herd of
17 10,000 caribou in a heartbeat. We don't do it because we won't.
18 We know how not to.

19 If you listen to us, we can teach you. But you have to be
20 willing to listen to us. Both the State and Federal government,
21 they have to be willing to listen to us. We've listened to you.
22 We've lived by the laws of the Federal and the State government.
23 But why not take our advice as we've been doing this for
24 thousands of years?

25 I cannot go down to California and tell you how to hunt

1 those crazy animals, you know. Because I don't know how. But I
2 can teach you to hunt our animals. I can show you how we hunt
3 our animals. Just got to be willing to listen to us. Thank
4 you.

5 MR. TAGAROOK: Before I go, one last comment, I want to
6 make it. I'm Terry Tagarook, for the record. You know, we have
7 to listen to the pros and cons of all -- what is happening with
8 the Federal, the oil company and our people. To our people
9 before White man came, we were taught to respect our elders, our
10 land, our sea, ourselves. Respect other people's property. And
11 we didn't have no police doing that, going after people that
12 were doing something wrong. That was up to the Council and the
13 Council had that power. But in the long run, the respect is
14 what we have always been shown to do to our environment, the
15 land, the sea, our animals.

16 If the government will listen to us, then please learn to
17 show respect to our environment. In this Arctic, animals, the
18 mammals we depended on before oil companies came up. We showed
19 -- they showed us respect, to show respect to our animals. It
20 took government and the oil companies and whoever it is, to show
21 respect to our environment. Things will go smoothly.

22 And that is one thing that everybody's got to learn,
23 respect. Trust and show others what is right and what is wrong.
24 I know that I was raised to show respect. And I'm looking at
25 the kids that are running around in the library. We weren't

1 even allowed to run around in a meeting or at the church, and
2 that's respect. And all the parents would reprimand us and we'd
3 quiet down and settle down. It's something that has changed.
4 And we know that change is coming. We cannot stop it. Progress
5 -- that's what's happening. And whether we like it or not, it's
6 going to happen. No matter what the outcome will be at the end.
7 But in the end, we'll be impacted. Thank you.

8 MR. OKTOLLIK: Terry, before you go, you addressed one
9 race and it was a White person. I would be happy if you say
10 that immigrants' children's, children's, children. Probably be
11 the proper words to say -- and you not put him into one category
12 when it's around 300 and some nationality.

13 MR. TAGAROOK: Whatever we do, I want Eskimo support on
14 the North Slope.

15 MR. AGNASAGGA: Hagar (ph) said we are the Endangered
16 Species.

17 MR. HOPSON: Yeah we will be.

18 MR. LOMAN: Well, I thank you for sharing everything with
19 us tonight. And we learned a lot. Hopefully, you learned a
20 little bit from us. And we appreciate your comments and your
21 time and effort and look forward to meeting you again soon to
22 provide information and to provide assistance.

23 So, barring any other comments, we'll close this record
24 and say a quick prayer for some good weather tomorrow so we can
25 go to Barrow and continue on with this mission. Thank you again

1 very much.
2 (Off record: 9:30 p.m.)
3 REPORTER: Off the record 9:30.

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TRANSCRIBER'S CERTIFICATE

1
2 I, Judy Bradshaw, hereby certify that the foregoing pages
3 numbered 2 through 82 are a true, accurate and complete
4 transcript of the Bureau of Ocean Energy Management Regulation
5 and Enforcement Public Hearing regarding the Environmental
6 Impact Supplemental Statement Relating to Chukchi Sea Sale 193
7 held in Wainwright, Alaska on November 4, 2010, transcribed by
8 me from a copy of the electronic sound recording to the best of
9 my knowledge and ability.

10
11 December 13, 2010 Judy Bradshaw
12 Date Judy Bradshaw

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Barrow

Bureau of Ocean Management Regulation and Enforcement

Public Hearing

Environmental Impact Supplemental Statement

Relating to Chukchi Sea Sale 193

November 5, 2010

Inupiat Heritage Center

Barrow, Alaska

VOICE CHECKED/CORRECTED

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Michael Haller, Community Liaison

Michael Routhier, NEPA Coordinator

Bob Peterson, Senior Geologist

John Callahan, Public Affairs Officer

Mary Cody, Wildlife Biologist

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PROCEEDINGS

(On record at 7:10 p.m.)

JEFFERY LOMAN: My name is Jeffery Loman. I'm the Deputy Regional Director of the Bureau of Ocean Energy Management Regulation and Enforcement, formerly the Minerals Management Service, probably more commonly known as MMS. They changed our name. And they are going through a major ongoing reorganization of the Agency with the goal to restore the public's trust. So that's who I am. We've got some other members of our team, some folks that have come to Barrow for the -- in the communities that we've traveled in for the first time, so I'm going to let them introduce themselves starting with Mike.

MR. ROUTHIER: Okay -- hi my name is Mike Routhier. I've worked on National Environmental Policy Act documents for the Agency.

MR. HALLER: I'm Mike Haller. And I'm the Community Liaison for the Bureau.

MS. CODY: Mary Cody, and I'm a Wildlife Biologist with the Agency.

MR. HOLDER: Tim Holder. I'm with the Agency and I'm based in Washington and (indiscernible). Based in Washington D. C. and I keep track of the Agency's activities are (indiscernible).

MR. LOMAN: Thank you. And thank you again for taking the time out of your Friday evening to attend this public hearing.

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The purpose of this hearing is born out of a couple of things. First, I guess, the National Environmental Policy Act or a law called NEPA, Federal environmental law that the Agency must comply with when it intends to take a major Federal action. In this case we have prepared a Supplemental Environmental Impact Statement to address concerns that came out of a Court remand.

In between 2004 and 2007, the Agency had planned, first, a sale in the Chukchi Sea, an oil and gas lease sale. Prepared an Environmental Impact Statement. Finalized that and issued a Notice of Sale. And then held the sale in the Chukchi Sea in February of 2008. From that sale, the Federal government issued 487 leases in the Chukchi Sea for a total of \$2.6 billion with Shell Oil Company being the largest leaseholder, holding a total of about \$2.1 billion in leases in the Chukchi Sea.

The Agency was challenged through litigation. Litigation filed in Federal court in a case that went before the Alaska District Federal Court, Judge Beistline. And the Court decided, in short, this, that, for the most part, the Agency complied with the provisions of NEPA. But the Court found that the Agency had not, and should have, analyzed the effects of any natural gas development and production that might occur. And, in these leases there were incentives for natural gas associated and connected with those leases.

The Court also said that the Agency must address. from

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1 Section 1502.22 of NEPA, an evaluation analysis of what the Plan
2 tiffs had submitted in their Exhibit 129, about 40 pages of
3 excerpts from their -- from the Agency's final Environmental
4 Impact Statement, statements regarding uncertainty or missing or
5 lack of information or data. And so that was the remand to the
6 Agency. And when litigation is filed in a NEPA lawsuit,
7 typically when the Agency doesn't fully comply with those
8 provisions in the National Environmental Policy Act, the Agency
9 is compelled to do NEPA where it didn't do NEPA, do more NEPA,
10 do NEPA right. Follow the provisions in full measure.

11 So to do that, and address this Court's remand we've
12 prepared a draft Supplemental Environmental Impact Statement.
13 Hopefully, you've had a chance to take a look at it. If not, we
14 have some copies here. It's available online. It's in the
15 libraries in all of the communities from Barrow, all the way
16 through to Kotzebue. And it's probably going to be one of the
17 shortest, if not the shortest environmental document, that this
18 Agency produces. Usually our Environmental Impact Statements
19 are much larger and onerous and complex. This document is
20 shorter and very straightforward.

21 So, we're here to take comments that you may have about
22 this draft Supplemental Environmental Impact Statement. But we
23 can talk about anything else. Talk about anything else you want
24 to talk about. But especially, we're interested in talking
25 about your concerns about our Agency. An Agency that is going

1 through a major reorganization with the President of the United
2 States' goal to create several Agencies, actually that will
3 restore the public's trust. And I think for us, at least for
4 me, being part of the Senior Management Team in Alaska, the
5 public trust in the communities of the Arctic are the most
6 important to us. They come first, that portion of the public.
7 And I would submit that, if we can restore the trust of the
8 communities in the Arctic, the rest of the United States will
9 follow.

10 So we probably have a lot to talk about. And we'll start,
11 I think, with just those who have comments that they came
12 prepared to present tonight. We have a Court Reporter. She
13 knows how to spell my name because she's been doing this and
14 listening to me for days and days now. But she doesn't know how
15 to spell your name. And so, if you would, if you have comments
16 to present, you can present them from the chair. You can come
17 up and use the podium. You can kick me out from in front of the
18 podium. And I'll sit down and let you stand wherever you want.

19 But she needs to hear you and she needs to know how to
20 spell your name. So we typically start with -- I like to start
21 with elders. Barring no comments from elders, I usually go to
22 Whaling Captains. And so, in that order, I would like to hear
23 your comments or anything else that you have to say. I bet
24 Harry has a comment.

25 UNIDENTIFIED MALE: I'll make it so the elders can get a

1 person to come (indiscernible).

2 MR. LOMAN: Okay. It's an open floor -- open to anyone
3 that would like to provide comments. Does anybody have any
4 questions while we build up a little courage -- questions about
5 the National Environmental Policy Act? Questions about the
6 Bureau of Ocean Energy Management Regulation and Enforcement?

7 UNIDENTIFIED MALE: I have one right now -- just for my --
8 in terms, I guess in terms of just getting to learn and time,
9 not hearing a timeframe in terms of when you started your
10 Supplemental and when do you -- are what timeframe are thinking
11 to end the comment period?

12 MR. LOMAN: That's a good question. When did we start the
13 Supplemental? Well this is a little inside view to how
14 government works. The Court issued their decision July 21st. We
15 read the decision that same day, at least I know I did. And I
16 read the decision and I said, we've got to prepare a
17 Supplemental Environmental Impact Statement to address this
18 remand.

19 Well then the Agency consulted with its colleagues at
20 headquarters and its attorneys. And a whole week or a week and
21 a half went by before they decided that we have to prepare a
22 Supplemental Environmental Impact Statement so I would say by
23 that time we were into August. And we probably -- I didn't let
24 the people like Mike know that they had to take the working over
25 until mid-August or maybe even late August. Something like

1 that?

2 MR. ROUTHIER: Yeah.

3 MR. LOMAN: Yeah. So mid to late August is when we
4 started -- and a couple of important dates. The first, I guess,
5 and most important date for those that want to comment to the
6 Agency on this particular document, is the deadline for taking
7 comments which is November the 29th. So there's still quite a
8 bit of time, but not a lot of time left to take your written
9 comments. You can send them by email, regular mail or hand
10 write them tonight if you would like, and we'll carry them back
11 with us.

12 UNIDENTIFIED FEMALE: I have a quick point on that.
13 Something I saw that were sent out by the Agency saying November
14 30th including the one that was sent to the Borough, the Mayor's
15 office, along with the draft of the Supplemental.

16 MR. LOMAN: I'll make a command decision and move that
17 comment date to November 30th. And I don't doubt for a minute
18 that there was some confusion there. The EPA announced -- they
19 set the comment date and deadline date automatically. And
20 theirs was the 29th, but we'll go right into the 30th, no problem.
21 And, from a practical standpoint, we take them until we really,
22 you know, have to get things moving.

23 But, yeah, the 30th could have been put out. People count
24 how many days -- I mean count -- the EPA counts one way,
25 somebody else counts another. So that's an important date.

1 The other important date, which is more important for us,
2 is the Court said, when some of the parties in this litigation
3 said to the Court, this shouldn't take a long time. The Agency
4 can do this in about 60 days or less. That was Shell. Shell,
5 as you can well imagine, after spending over \$2 billion on
6 leases has an interest in this case. And the Court said, well
7 six months from my initial ruling, January 21st, the Agency
8 should have that done.

9 It's unknown what the Court really means, by done, because
10 the way NEPA works, in addition to requiring the Agency to
11 analyze the effects of a major Federal action, in addition to
12 being a Sunshine Law and have everything that we do, like this
13 draft document -- this draft document, open and available for
14 your review to take your comments. Hold public hearings like
15 this one, answer those comments, try to address any concerns
16 that come out in these public hearings. NEPA requires that we
17 issue a final EIS -- allow for review before a record of
18 decision comes. There's a time period there. Remember, it's 45
19 days.

20 And then, issue a Record of Decision. In this case, the
21 Record of Decision is probably going to be pretty simple in that
22 the Secretary can either reaffirm the Sale, let the Sale stand
23 as it is, or not. Not would be some work for us because we took
24 \$2.6 billion into the U.S. Treasury from these companies and
25 issued these leases. So we would have to back away from our end

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1 of the bargain, or the United States end of the bargain. Pay
2 some money back and deal with the leaseholders.

3 We think, after giving some thought about the draft
4 Supplemental that we have before us, that the Secretary can
5 reaffirm the Sale. But we're not there yet. And we haven't
6 finished listening to comments, reading comments and addressing
7 comments that we receive. So we really don't know yet.

8 MS. LEAVITT: For the record, I'm Roberta Leavitt, L-E-A-
9 V-I-T-T.

10 MR. LOMAN: Thank you.

11 MS. LEAVITT: I think to a few of these MMS -- I'm sorry I
12 can't remember what your Agency --.

13 MR. LOMAN: Bureau of Ocean Energy Management.

14 MS. LEAVITT: Maybe you should write it as I'll remember.
15 But --.

16 MR. LOMAN: It doesn't make any difference.

17 MS. LEAVITT: I signed my name in and I was requesting for
18 copies. I got one. But then, now you're saying another one is
19 out. How do we get on the email list? Or is it only a one time
20 email that you get information for? I mean like how are we
21 going to know what you're asking questions about, but we still
22 have concerns about what's going on. And maybe you should have
23 had copies out, ready for us, to -- try and look at it at least.

24 MR. LOMAN: Did you get a copy of this document?

25 MS. LEAVITT: No.

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1 MR. LOMAN: No, okay.

2 MS. LEAVITT: The one I got was four volumes.

3 UNIDENTIFIED FEMALE: You have any more of those?

4 MR. LOMAN: I think we have a few more here. They're
5 available online.

6 MS. LEAVITT: And how are we supposed to know when they're
7 available online when, you know, we're not bigwigs. But I
8 consider myself a bigwig being a Captain's wife.

9 MR. LOMAN: Un-huh (affirmative).

10 MS. LEAVITT: You know this stuff is important to me,
11 along with my family and what we do. And I want to know about
12 what this stuff is doing too, you know. Because I'm the one
13 hunting and I go hunting with my husband. I butcher his
14 catches. And I've got words to say too, but I can't say them if
15 I don't know what you already -- it's like you already got all
16 these things figured out. And you haven't even heard me.

17 MR. LOMAN: Un-huh (affirmative).

18 MS. LEAVITT: I'm like, this is your first meeting here
19 under a new name, but I know I've seen you before.

20 MR. LOMAN: I remember you.

21 MS. LEAVITT: So you see what I mean? How do I know?

22 MR. LOMAN: Well --.

23 MS. LEAVITT: I'm not in a position -- I'm not in a
24 Director's position. You know, I have internet on my own -- at
25 my own home.

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1 MR. LOMAN: Un-huh (affirmative).

2 MS. LEAVITT: I only saw this meeting posting a week ago.

3 MR. LOMAN: Un-huh (affirmative).

4 MS. LEAVITT: Like, where am I supposed -- it didn't even
5 say where I could get this kind of information.

6 MR. LOMAN: Well --.

7 MS. LEAVITT: It was -- it should be on the TV or around
8 me --. It should be on the radio. I know there was -- it's in
9 the paper. But then that, you know, that -- I didn't see that
10 until way later.

11 MR. LOMAN: Okay -- let me just say this. We can put you
12 on our list and send you everything we send to everybody, bigwig
13 or not. You'll be as big a wig as you can get. And we're happy
14 to do that. We have a list -- it's a long list. And we can
15 send you all of environmental documents. You may or may not
16 want that. But you can always tell us to stop. So that's a
17 start.

18 The other thing that's easy to do is just go to our web
19 page, which is not too hard to navigate, the Alaska Bureau of
20 Ocean Energy Management Regulation and Enforcement, used to be
21 MMS, web page. And you can check on us daily or weekly and see
22 what we have going on. We have a lot going on. But it's not so
23 much that once a week a concerned person, like yourself, could
24 check and see what we're up to. And then you can call 907-334-
25 5200 and ask for me. And I'll give you an update on the

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1 telephone every day if you want. That's easy to do. And I talk
2 to a lot of people. And I talk to a lot more people that are
3 just like you and me than I talk to bigwigs, that's for sure.
4 And I'm glad to do that.
5 MS. LEAVITT: Can you say that number again?
6 MR. LOMAN: 907-334-5200. And if you get a recording
7 because it's after hours or they're tied up and they can't get
8 to the call, the urgency number is my cell phone number that I
9 carry 24 hours a day. And now, thanks to improvements, it works
10 in all the communities in the Arctic, as it's worked all week
11 this week traveling through Kotzebue, Point Hope, Point Lay and
12 Wainwright and here. So, you can get a hold of me 24/7.
13 Yeah, and we'd be happy to put you on that list. Mike,
14 you can make a note and get her on that list that you guys
15 maintain. Don't blame me though, when they bury you in
16 paperwork.
17 MS. LEAVITT: It's important. You know even just an email
18 --.
19 MR. LOMAN: Sure.
20 MS. LEAVITT: -- to say there's an update or, you know. I
21 know how much it is to send this out, especially the one I got
22 before, four volumes.
23 MR. LOMAN: We have to FedEx it to get it to people quick
24 enough to --.
25 MS. LEAVITT: Right, so even just an email might even be

1 cheaper for you. But still having that Notice sent to other
2 people that are in big positions you know. I'm sorry, but I do
3 consider myself in a big position.
4 MR. LOMAN: I do too.
5 UNIDENTIFIED MALE: I feel the same way as her. I just
6 got that little piece of paper that was a notification about the
7 meeting. And I don't know how you guys send them out. It takes
8 -- you said something about Fairbanks. It used to take about
9 two weeks to get it.
10 MR. LOMAN: Anchorage.
11 UNIDENTIFIED MALE: And so we have this by-pass mail that
12 takes forever to reach up here. So, this notification -- my
13 daughter's at home. My daughter reminded me that there's a lot
14 of vehicles over here, so I came over here. There's no
15 notification at all.
16 MR. LOMAN: Uh-huh (affirmative). Okay -- noted on there.
17 Somebody in the back?
18 MR. SAM: My name is Sam (ph). I was just going to
19 suggest for these important documents, your meeting is right
20 next door to the library. And it might be worth talking to a
21 Library Director and seeing if he would receive a set for the
22 community.
23 MR. LOMAN: Yeah, they're sent -- the libraries are sent
24 automatically. And there's a copy over there. Yeah, that's
25 another source is the local library. I don't know -- we

1 physically looked and found them in the, even in like Point
2 Hope, Kotzebue, the libraries. We had our meetings in some of
3 the libraries in the villages and they did arrive there. But,
4 you know, a library puts them on the shelf and doesn't put a
5 blinking light on them. Yes sir.
6 MR. OLSON: My name is Donald Olson. I'm the State
7 Senator from the area and one of the -- I'm not that familiar
8 with the new NEPA. I know that's what you're trying to do is
9 get comments on it. But the concern that we have in the last
10 six months is that a lot has happened as far as dealing with
11 offshore drilling and those kind of things.
12 Obviously, in April, we had the blowout down in Gulf of
13 Mexico. In June you had the Beistline -- Judge Beistline's
14 decision related to that. Then you had the moratorium put on.
15 And a number of developments have happened. And with President
16 Obama in place and his mental framework, and then now we've just
17 gone through an election where it looks like the Republicans
18 have taken over control of, at least, one of the bodies. And
19 we're going into this time now and it's all over-shadowed by the
20 fact that, during the last session down in Juneau for the State
21 Legislative session, we couldn't get a Coastal Zone Management
22 Plan through, that MMS always is very familiar with.
23 With that in mind, how is this new NEPA law going to
24 protect the people that are along the coast, if you're
25 prioritizing against something that may -- we'll have disasters

1 (indiscernible) declares another mishap, especially if ice is in
2 place. And, what kind of protection can you assure the
3 constituents, myself included, that we'll have something to hang
4 our hat on?
5 MR. LOMAN: NEPA isn't new. Signed into law by President
6 Nixon. It's probably one of the premiere Federal environmental
7 laws. It's definitely the most litigated Federal environmental
8 law (indiscernible). And the -- in the beginning Federal
9 agencies were slow to comply. And people who challenged Federal
10 agencies prevailed, in the beginning. That changed as the
11 Federal government, all these different Agencies taking every
12 kind of Federal action imaginable.
13 Just to let you know, I've worked for -- on NEPA projects,
14 starting with Hazardous Waste Facility, when I worked for the
15 Navy, the EIS for that. I've worked on NEPA projects that
16 involved large hog farms, hydropower re-licensing. So there's
17 just a huge variation of things that the Federal government
18 might have to comply with NEPA on. But it's a planning
19 document. And it's designed to inform the public, get public
20 participation. And then inform the ultimate decision maker of
21 the effects to the human environment.
22 And when you do an Environmental Impact Statement, there
23 may be negative effects. And there may be significant risks to
24 the human environment. And then it's going to be up to the
25 Secretary of Interior, or whomever he or she delegates, to make

1 a decision whether or not that risk is acceptable.
2 And in the case of the Chukchi Sea Sale 193, I had just
3 come to work for, then, MMS. Happened to be in Washington D.C.
4 for some meetings when they briefed the Assistant Secretary of
5 Land and Minerals Management on this upcoming lease sale. It
6 was his decision, Steve Allred (ph) was his name. I actually
7 knew him when he was a State -- the State head of Idaho's DEC.
8 I was a Federal employee. He was running the State of Idaho's
9 Department of Environmental Conservation. Now he's the
10 Assistant Secretary of Land and Minerals. He's delegated the
11 Secretary's authority to make the decision to go ahead with the
12 Chukchi Sea Sale or not.

13 He asked the question -- he said, there's a roomful of
14 people. I'm just a little guy sitting there from Alaska. And
15 he said, well now that the Secretary's been up there on the
16 North Slope and talked to those folks, are they still worried
17 that the oil companies can't clean up a major oil spill? Oh,
18 oh, you know, that's one of those questions where they're asking
19 and the real answer is something they might not want to hear.
20 So there's dead silence in the room. And I had just been up at
21 these communities managing, scoping meetings for the Arctic
22 multi-sale EIS that we were working on. And so, I knew, no,
23 people were not confident in industry's ability to clean up a
24 major oil spill. And I said, no, they're not. They don't
25 believe it.

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1 And so his next question was, well, can they? And I said,
2 in the worst weather day in the Arctic, they'd be lucky just to
3 stay alive, much less clean anything up. So, you know, I bet my
4 money on prevention -- better not have a major oil spill. And,
5 you know, he thought about it for a minute and he said, what
6 does it say in our documents? I said, there's a risk but the
7 risk is remote. And that, if there's a major spill, that they
8 might clean up a 12 percent of what's spilled.

9 MS. LEAVITT: Now when you say remote, though, whose
10 decision is that?

11 MR. LOMAN: Well, remote --.

12 MS. LEAVITT: Remote on their end -- it's real high on our
13 end.

14 MR. LOMAN: Statistically -- I'm using remote from a
15 statistical percent. Is one in ten thousand or greater?
16 Somebody might say that's remote. You might say it's not remote
17 enough, you know. That's -- and I -- that's totally acceptable.
18 But he said, I'm going to go ahead and approve it anyway. But I
19 want the lawyers to look at it. He looked around the room and
20 said, you guys aren't like BLM. You don't bring your lawyers
21 here for this. And let the (indiscernible) guys look at it --
22 he made the decision (indiscernible) have to say. So there, now
23 you've got the inside look at how it works. Because that's
24 exactly what happened.

25 But at least he asked the question. At least he asked the

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1 question, how do the people feel? What can industry do?
2 And, quite frankly when you have -- like -- it's the
3 documents you receive, the big stack of documents. Those people
4 in that position, they cannot possibly have the time to read, in
5 entirety, all of the environmental documents that come before
6 them. But the bottom line decision, the risks that are out
7 there, how people feel, he can ask the question or he can read
8 the Executive Summary. The choice is his. And we serve the
9 Administration, their political appointees. And our job is to
10 tell the truth.

11 UNIDENTIFIED FEMALE: What is the plan, God forbid,
12 there's a spill? What is the plan?

13 MR. LOMAN: If there's a spill? Well, right now we have
14 an updated, for example, we have an updated exploration plan
15 that was submitted to us by Shell. In addition to their past
16 exploration plan that they submitted for what would have been
17 this past open water season, which did not take place because of
18 the Deepwater Horizon spill, they have added a few more things,
19 in addition to what they intend to do.

20 And what they intend to do is to put enough on site 24/7,
21 right there on the spot, spill response capability to clean up a
22 worst case discharge. Now we all saw the Deepwater Horizon.
23 There was straight uncertainty about a number of things. How
24 much is coming up of this thing? The rig catches on fire. It
25 topples over. And now there's a massive release, uncontrolled

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1 release of oil coming up.

2 In the Deepwater Horizon case, it's coming up a mile deep,
3 a mile deep. So, no, there's a scale like this. That's -- on
4 our scale it would be a mile deep. And this oil is coming out
5 and moving to the ocean. They don't know where it's going to
6 surface. And we all know, from watching the news, didn't know
7 exactly how much. Well, as it turned out, when they really got
8 a good calculation of how much was coming up, and it was a lot,
9 it was very close to the worst case discharge analysis that was
10 done, very, very close.

11 So Shell is prepared to deal with an uncontrolled release
12 of the worst case discharge estimate right there on site. Now,
13 does that mean that the worse weather days won't disrupt with --
14 they're prepared to do? No. On the worse weather days in the
15 Arctic, real bad luck weather days, in addition to the bad luck
16 oil spill that shouldn't happen in the first place, I start --
17 I start to lose some confidence then. But they've added some
18 more -- a second drill rig to drill a relief well will be there
19 right in the region, ready to go to work in the event that they
20 need to do that. That's another thing. Remember the Deepwater
21 Horizon, it was -- I don't remember exactly now -- you try to
22 forget it, it's such a -- I don't know, you forget pain, I
23 guess. But it took days, weeks before the relief well started
24 to drill.

25 You remember the containment dome that they built while

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1 the uncontrolled release was occurring. Shell now intends to
2 have a containment dome right there on site. But instead of the
3 mile depth, Shell's is 150 feet deep. The oil will come, in the
4 event of an uncontrolled release, will come to the surface in
5 seconds, not days. The oil will come to the surface right
6 there. It won't travel, because it doesn't have to travel far -
7 - 150 feet has a pressure of -- do the math now, three, four,
8 five, about five times the pressure we're under now. We're
9 under atmospheric pressure of 14.7 pounds per square inch. The
10 pressure at a mile depth is over 200 and, about 2,300 pounds per
11 square inch. It's like being -- it would be like being inside
12 of a scuba bottle fully charged, tremendous pressure and
13 tremendous depth. That's not the case in the Arctic.

14 So, Shell's proposed response is about at the place where,
15 if you start adding more, just to be sure, then more means more
16 impacts. The more ships, the more chance for bird strikes into
17 ships, more chance for ships to run over marine mammals, the
18 more chance of more ships disrupting activities, other
19 activities, including some subsistence activities, in my mind.

20 UNIDENTIFIED FEMALE: I guess my biggest worry is the ice.
21 What if there's a leak under the ice?

22 MR. LOMAN: Well, under the ice -- and ice comes in, as
23 the Whaling Captains, that are in the room, know ice a lot
24 better than I do. But ice comes in different forms. Right now,
25 I think we're looking at -- out here now what is typically

1 called young ice. That's ice that can be managed, moved around.
2 Thicker ice, and very thick ice that can't be managed, then you
3 have oil under ice.

4 What will they do? They're going to have to continue --
5 they have to continue and their plan calls for them to continue
6 to go after that oil that's been spilled in an uncontrolled
7 release. How do they do it? They've got to get through the ice
8 and get at it.

9 UNIDENTIFIED FEMALE: How -- yeah -- how?

10 MR. LOMAN: How to get through ice? Drill through it, cut
11 through it, move through it through -- move it out of the way
12 with giant ice breakers.

13 UNIDENTIFIED FEMALE: We don't want you to do that.

14 MR. LOMAN: I understand. No one wants -- the first,
15 before that starts, you don't want the uncontrolled release.
16 You don't want the spill. Deepwater Horizon didn't have to
17 happen. It didn't have to happen.

18 The Exxon Valdez didn't have to happen. The Exxon Valdez
19 happened because somebody was too tired to make a turn. One man
20 was too tired to make a turn. If he would have made the turn,
21 the Exxon Valdez wouldn't have happened.

22 UNIDENTIFIED FEMALE: But you have new voices here --.

23 MR. HARCHAREK: -- that community -- are still affected by
24 it today. Everybody, not just the Native community that, you
25 know, wasn't properly taken care of. But everybody is still

1 affected -- 20 years later.

2 MR. LOMAN: I know. I'm sorry -- we have a Court Reporter
3 -- I'm bad at this -- Judy just remind me.

4 MS. LEAVITT: Where's the microphone.

5 MR. LOMAN: She would like --,

6 MS. LEAVITT: They can hear people in the back.

7 MR. LOMAN: Can you tell us your name and spell your last
8 name for the Reporter?

9 MR. HARCHAREK: Hi, I'm Art Harcharek. Last name is H-A-
10 R-C-H-A-R-E-K.

11 MR. LOMAN: Thank you. Yes?

12 MR. HARCHAREK: Twenty years later, the people of that
13 area are still affected by Exxon Valdez. They say you don't
14 have to dig very deep into the soil and oil still comes to the
15 surface. To put all that on one person's judgment, whether he's
16 tired? I mean, that had a whole community, a whole population's
17 risks. I don't, you know, see how anybody has the power to even
18 make that decision. Thank you.

19 MR. LOMAN: Thank you. So -- for some folks that came in
20 after we started, we're taking comments on a draft Supplemental
21 Environmental Impact Statement. But we're also talking about
22 many other offshore oil and gas activities, issues, concerns.
23 And including the organization we are with, the Bureau of Ocean
24 Energy Management Regulation and Enforcement, formerly MMS. An
25 organization that is going through a major restructure and

1 reorganization -- so.

2 UNIDENTIFIED FEMALE: You guys are going through a major
3 restructure organization right now?

4 MR. LOMAN: Yes.

5 UNIDENTIFIED FEMALE: Okay. So you we're supposed to
6 depend on a corporation that's -- doesn't have a very good past
7 history of oil spills. And then you guys are restructuring the
8 plans and --?

9 MR. LOMAN: The reorganization is the impetus for it. The
10 reason that the President has directed it is because the public,
11 including you obviously, they lost confidence in the Agency's
12 ability to regulate. And to quote the President, what the
13 President said was, it's an Agency who discharged their
14 regulatory authority with disdain. We're showered with gifts
15 from big oil executives. That's the Agency that I work for. I
16 worked for it then. I've worked for this Agency for over three
17 years.

18 I can tell you this. I don't work for oil companies. I
19 don't take any gifts from oil companies or anybody else. I
20 serve the Administration with pride, without prejudice. And I
21 serve the people of the United States. Shell Oil Company is no
22 important -- more important to me than you are, or anybody else.
23 And the goal is to create -- and it will be announced, we think,
24 in a few more months, a new Agency that's the part of our
25 current Agency, our Inspectors, the regulatory arm. And the new

1 name for that Agency will be the Bureau of Safety and
2 Environmental Enforcement. And that Agency, the goal is to
3 restore the public's trust.
4 Some people in Washington D.C. have been given the charge
5 to put that together, that new Agency, new name. And design it
6 in a way that will restore the public's trust. They've talked
7 to us. They said, what's your recommendations? Our
8 recommendations are, in short, the Agency must be feared and
9 respected by industry. Feared and respected by industry. And
10 so, how do you do that? Well, it should be very experienced in
11 the full spectrum of regulatory activities, all the Federal
12 environmental regulatory framework, every environmental law.
13 This new regulatory Agency should be able to enforce. Worker
14 safety, so the inspectors would have experience as industrial
15 hygienists, or safety -- workplace safety expertise.
16 In Point Hope the other night, talking to the President of
17 the Native Village of Point Hope, the President, said we think
18 that your Agency should start to regulate industry to prevent
19 disruptions to subsistence activities. Which, I went, you're
20 right. In the Arctic, this new Agency should have an expertise
21 that would come from being an MMO, Marine Mammal Observer.
22 Being a Whaling Captain, or at least a whaling -- a
23 seasoned whaling crew member. An expert on all of those things
24 of the Inupiat culture that are self-defining practices. All of
25 the subsistence activities and other activities. Part of a

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1 regulatory team that can prevent disruption, erosion or
2 otherwise harm the culture of the communities in the Arctic.
3 We're going to make that recommendation. And we think, because
4 we've had conversations with a number of leaders in Native
5 Villages and leaders in other organizations, that they will
6 support that.
7 UNIDENTIFIED FEMALE: It's hard to be respected here when
8 you look at Valdez -- that these people 20 years later -- they -
9 - all this was tied up in court and they're just now getting
10 restitution checks for \$1,200.00 or something crazy like that.
11 Anybody else know anything about that? You know, when accidents
12 do happen, the people are not helped at all. The oil's not
13 cleaned up and the community's (indiscernible). So, until I see
14 an action to fix that, what's the use?
15 MR. LOMAN: The Exxon Valdez was the impetus for a number
16 of very powerful Federal laws. The Oil Prevention Act of 1990
17 came about because of the Exxon Valdez spill. I encourage
18 people to pay attention to, his name is Kenneth Finegold (ph),
19 who is administering the fund that has been created. This is
20 funds, money, that BP agreed to put into an account. There were
21 175,000 claims that sits before this administration -- this
22 group under Mr. Finegold (ph) -- is charged with administering.
23 I listened to him night before last. According to him, 110,000
24 claims have zero evidence to support them. Now that doesn't
25 mean they just threw them in the wastepaper basket. They're

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1 working with those people to help them put those claims
2 together.
3 The difference, I think, between what's happening now to
4 address the harm, the injury, the damages to natural resources,
5 the lost use of resources, caused by this disaster that BP and
6 others possibly are responsible for in the Gulf of Mexico,
7 should set a distinct difference between what we know, and you
8 correctly articulated to be the case of the Exxon Valdez. We
9 all live in and under and subject to laws. And the Exxon Valdez
10 created some powerful new laws. And, so, companies have to
11 behave differently because of it. And funds were created that
12 are managed by the Coast Guard and so on and so forth.
13 It's not a perfect world. And I understand the
14 frustration and fear that people feel because of the misgivings
15 of shortfalls of government Agencies and the laws of the past.
16 I feel the same way.
17 MR. BROWER: In common (indiscernible). Harry Brower, for
18 the record. (indiscernible) In regard to this discussion here
19 in terms of the oil pollution happening in 1980. That Act is
20 subject to address -- to compensate the commercial enterprises.
21 And it doesn't so much address the subsistence -- to -- how do
22 you compensate for the loss of subsistence resources? It
23 doesn't identify anything of that sort of thing, in that Act.
24 I've asked and tried to look with folks that were working on
25 that Act before. There's different Agencies in there, between

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1 the Coast Guard that worked on the oil pollution at Valdez. And
2 they say, they've been trying to define or putting the means for
3 compensating the loss of subsistence resources. And, it's not
4 been addressed to date. And somebody should have. You all have
5 been involved what the pollution Act is structured. It needs to
6 be very well understood in terms of how it's supposed to be
7 compensating commercial uses. The losses (indiscernible). If
8 you have (indiscernible) comes (indiscernible) compensated for
9 (indiscernible).
10 MS. WILLIAMS: I am Vera Williams, for the record. I want
11 to comment on NEPA. You mentioned Shell Oil and about their
12 prevention program. If the drill rig was to be that close to
13 collect all that oil, where were they going to take it? Are
14 they going to take on land? You know, what's the options? And
15 I, you know, if there's stipulations there, what are they going
16 to be stipulating -- do with all that oil that's coming out? Or
17 to take it to somewhere -- what, they going to dispose of it or
18 put it down the pipeline that is going down from Prudhoe or --
19 what's the big plan for that, if that was to ever occur? I
20 mean, I haven't heard. What would happen once they collected
21 all the oil at their spill?
22 And, another thing also about a compensation for the
23 subsistence families. I just (indiscernible) about 20, 25 years
24 ago. Or are you guys going to compensate the Native people? I
25 know beef doesn't go a long way for us because, we don't eat

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1 beef. We eat seals. We eat whales. And one cow will last me a
2 month. Will I be compensated a cow for the year? That wouldn't
3 go for us around here. We are Arctic people that need our seal
4 oil to eat with our food. Those are the types of things that we
5 could be, you know, thought about when your structure and your
6 stipulations and your compensation plan for -- for the Natives
7 that live up here.

8 MR. LOMAN: Thank you.

9 MR. JEFFERY: Hi, my name is Mike Jeffery, J-E-F-F-E-R-Y.
10 I've lived in Barrow for 33 years. Question is this, you're
11 saying that this meeting is to comment on the Environmental
12 Impact Statement. I would like to see -- because I'm not going
13 to raise my hand because I haven't seen it. Has anybody here
14 seen it? That we're supposed to comment on?

15 UNIDENTIFIED FEMALE: I've seen it, just now.

16 MR. JEFFERY: Well where is it?

17 UNIDENTIFIED MALE: In the computer.

18 MR. JEFFERY: One copy -- couple of copies?

19 UNIDENTIFIED FEMALE: Because I haven't seen it until
20 tonight.

21 MR. JEFFERY: Well, I mean, it's not a very meaningful --
22 if none of us knows exactly what the -- what the recommendations
23 are. I mean, sometimes when -- I mean it's great that you guys
24 are making the effort to do outreach to the various villages and
25 come to Barrow. But, you know, in different hearings there's at

1 least (indiscernible) like, at the beginning. You know here's a
2 summary. Here's our main (indiscernible). Here's a handout.
3 And we're all sitting here kind of in the dark except a few
4 people who made a copy. But they seem to have gotten some
5 summary of it but. And so I just -- it just needs to be -- we --
6 -- as we're sitting here, we can't really comment on this because
7 we don't know what you guys are saying in your recommendations
8 and stuff like that.

9 Well, you'll certainly be getting some wonderful comments
10 on the whole idea of offshore oil drilling. That as a
11 meaningful exercise and comments from this community on a
12 document that, you know, we haven't seen -- is not meaningful at
13 all. So, I just think that needs to be kind of registered.

14 And then the other thing is, you know, you've talked about
15 how much easier it is up here if there was an oil spill compared
16 to the Deepwater Horizon. But another way of looking at it is
17 the Gulf of Mexico is a piece of cake compared to the Arctic. I
18 mean, just think of the ice and the wind. And, you know, these
19 -- all these people are coming forward to say, oh, well, it'll
20 be so easy up here because it's so shallow. Well my goodness --
21 yes it is. But, look at all these other factors that need to be
22 contended with. So, I mean, these very heartfelt comments here
23 about well, how are you going to deal with it? Where are you
24 going to put the oil? I don't get it. What about the ice?
25 This is all really important stuff. And, somebody focusing on

1 this is easier than the Deepwater Horizon doesn't cut it here.
2 This -- the environment here is much more difficult. So, that's
3 my two cents.

4 MR. LOMAN: Let me just respond to that quickly. I hope --
5 -- sometimes it may sound that way. The people think that my job
6 is to come here and talk somebody into something. That my job
7 is to put those kinds of fears to rest. That it's my job to say
8 it's so much easier. We talked about ice management problems
9 and the Assistant Secretary -- I don't know if he had arrived
10 yet. The Secretary of Land and Minerals Management, when he
11 asked if people thought industry could clean up a significant
12 spill before he made the decision to go ahead with the Chukchi
13 Sea Sale, the answer from me was no. People aren't confident in
14 it. And his next question was, can industry do it? And I said,
15 quote, myself -- I remember it very well. On the worst weather
16 day in the Arctic, they'd be lucky to stay alive much less clean
17 anything up. And that's part of this NEPA process is to do
18 analysis. Inform the decision maker and tell the truth. Not
19 always say what people want you to hear. Some Administrations
20 might want to promote development. Some Administrations might
21 not.

22 One thing about all Administrations, they want to do this.
23 They want this activity, when it does occur, it occurs safely.
24 And they want this industry to act within an environmentally
25 responsible manner. That's done through endless demonstration,

1 not a bunch of slapping on the back and talking about what a
2 great record we have. Like they and my Agency has done in the
3 past. It's done through endless demonstration. So, please
4 don't think that I'm trying to talk somebody or alleviate fears.
5 I share your fears. We're well aware of the hazards of these
6 kinds of activities in the Arctic. And it's our job to make
7 sure that, if industry does it, they're fully prepared to deal
8 with the Arctic environment insomuch as you can be.

9 And then in the end, the decision maker hopefully, is
10 dutifully informed and makes the right decision. So, to set
11 that record straight. And, yes sir, you had a comment.

12 MR. NINGEOK: Yeah, Robert Ningeok, for the record. You
13 guys tell the same people the same thing before you guys --
14 these spill down there -- down in the states? You guys tell
15 them the same thing, you telling us?

16 MR. LOMAN: To tell people --?

17 MR. NINGEOK: You told them the oilfield would be safe?
18 It would be easy for you guys to clean up a spill down there?

19 MR. LOMAN: No.

20 MR. NINGEOK: It's different here. I know the ice flow
21 and the oil well can drill through the ice and go in the water.
22 You know, we have strong currents. If that oil spill out of the
23 pipes, it'll just soak right through. It's going to be
24 impossible, you know. I worked on the Valdez oil spill. I saw
25 what you did. We have strong currents -- I go (indiscernible).

1 We'll lose our lives, subsistence -- all our fish
2 (indiscernible). I was there. I saw it all.
3 MR. JUBA (ph): My name is Patrick Juba (ph). And you
4 guys talk about the Exxon Valdez and the rig that blew up.
5 Valdez had just had the oil in it. But the rig that blew up had
6 chemicals on that platform. And the same things going to be
7 around those platforms on -- if they start drilling out here.
8 And don't know how much of that chemical -- it's dangerous for
9 the animals or even for humans. So, and they say it's a lot
10 safer. And it'd be a lot easier because it's not as deep.
11 But the shallower it gets, the waves get closer to each
12 other and it's going to be hard trying to keep them boats in the
13 water. Because the waves are closer to each other than --
14 anyplace where it's deep.
15 MR. LOMAN: Thanks.
16 MS. HEPA: My name is Tagulik Hepa, H-E-P-A. I just
17 wanted to make one comment here about -- seeing like you're --
18 I've been attending these meetings. This is my 19th year. And I
19 just want to say that, in the 90s, when I came to these
20 meetings, there would be a roomful of Whaling Captains
21 (indiscernible). I just want to thank all the people for coming
22 today to speak on the issue.
23 But you are correct that there is a lack of trust with
24 your old organization and your reorganization of your new --
25 your new BOEMRE -- I think that's the name on it. That it's

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1 going to take a lot of work because you need to come to the
2 community not to talk about a Supplemental EIS, but to talk to
3 the people of the North Slope how you can regain our trust.
4 Because we've been coming to these meetings for over 25
5 years. You've heard our hunters, our whalers say the same
6 things over and over. We are very concerned about OCS
7 activities. We've always been strongly opposed to it. We
8 understand that we can't stop it. So the people of the North
9 Slope need to have a meaningful role. And we need to have that
10 type of open dialogue and how can we be at the table to make
11 sure that the right decisions are going to be made to protect
12 the interests of the North Slope, the interests of our people?
13 And, so regaining the trust, you know, is going to be a
14 lot of work. So please come back. Meet with the whalers
15 because I want to see more Whaling Captains come back to these
16 meetings. There's too much going on. I think people are tired
17 of talking about the same things over and over. And as the
18 other gentleman had said here, and Michael, that I don't have
19 faith that it's going to be easier to clean up an oil spill in
20 ice conditions. You know, the weather factor today, if there
21 was an oil spill eight miles out where the lease sales are -- I
22 have very little confidence that you'd even be able to get out
23 there to evaluate the situation. I don't think no helicopters
24 could go out there. I don't think that a big ship could go out
25 there, you know, to go see what's going on. It's just way too

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1 dangerous. The conditions are very extreme. We have a lot of
2 respect for the ice and the oceans out there. And we understand
3 the force that they have. Thank you.
4 MR. LOMAN: Thank you.
5 MS. LEAVITT: Roberta Leavitt again. I got two questions.
6 One goes towards the production for what Vera was saying. When
7 you have the production flowing, what is the process? Like she
8 was asking, is it going to go through Prudhoe Bay? And we all
9 know that Prudhoe Bay was only lifetime expectancy was going to
10 be 25 years. And it's already starting to break down. There's
11 even been people who are supposed to be Inspectors or even
12 qualified to be Inspectors. And we can't -- we don't, you know
13 -- how can it be stronger so that the Natives even have a word -
14 - a say in those inspections? You know, you didn't even hear us
15 when we were telling you that the whales go through that
16 migration route is right there where the sales happened.
17 And we say -- we say -- we say and still it's not being
18 heard. We're gonna still come and say, you know, that's because
19 our trust is still not there. I read about it. I heard through
20 PBS that Shell, not Shell but BP's had all these other extra
21 problems on land. Now you harvested in the water bringing to
22 land -- where is it going to go? Is it going down that same
23 pipeline that's deteriorating? Are they going to make a new
24 one? Have they even decided any of that yet?
25 We see all of that because it's a long term thing for us

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1 up here, with our subsistence. I get sick animals from the
2 ocean and I know that they don't smoke. I have seals that come
3 back with cancer. And we still can't -- how are they getting
4 it? You know we weren't getting any answers of how it's getting
5 into the ocean. But we tell them and tell them and tell them
6 over and over again that we're harvesting sick animals. I get
7 at least three, two, maybe three a year that I cannot use or
8 eat.
9 And it's not what we're doing. You know, that's our
10 respect for the land, our respect for the water. And we still
11 have to voice it, because people that do not live here are
12 making decisions of our lives, what we live off of. And there's
13 -- how many times of patients now. You know, how do you know
14 that they're not getting it from what they're eating?
15 UNIDENTIFIED MALE: (Indiscernible).
16 MR. LOMAN: People start off -- it happens all the time --
17 they start off I've got a couple of questions but.
18 UNIDENTIFIED FEMALE: Can you answer the question on how
19 it's going to land or where it's going?
20 MR. LOMAN: Contaminants? Or --
21 UNIDENTIFIED FEMALE: No -- is there going to be a
22 pipeline?
23 MR. LOMAN: Yeah, that. I'm glad you said that because
24 that is relevant to the Supplemental EIS, sort of. I mentioned
25 earlier that the Court said, analyze the effects of natural gas

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1 because the leases have incentives connected with natural gas in
2 them. Chukchi is thought to believe to contain a vast amount of
3 natural gas. So natural gas analysis by the Agency in this
4 draft Supplemental EIS occurred this way.

5 Our resource evaluation people came up with a reasonable
6 scenario. The reasonable scenario has a couple of basic
7 components to it. First, it's not going to happen for a long
8 time. Gas is maintained in these wells because gas has -- the
9 gas is the pressure that buoys the oil to the surface. Oil is
10 more valuable than gas, so it's going to be somewhere between 15
11 and 30 years before gas would be ready to go to market. And
12 that's if they explored next year and they found a viable
13 resource.

14 I would just point out, in Alaska's OCS, it's most likely,
15 or it has been the case, that they would explore in the Chukchi
16 and they would explore in the Beaufort. And like the rest of
17 Alaska's OCS, they found no viable -- economically viable
18 resources and they walk away. And all of these meetings and all
19 this fear and all of this discussion would really be for
20 nothing, in that case.

21 The natural gas then, in 15 to 30 years, if it went to
22 market would be pipelined to shore, cross NPRA, connect to a
23 pipeline. And we don't exactly whether it would be the AGIA
24 version or some kind of natural gas pipeline that we think would
25 travel in the same direction, at least initially, as TAPS. And

1 then what happens to it after that, we just don't know. These
2 are things that are 10s, 10, 20, 30 years away.

3 So we've analyzed a reasonable scenario in this draft
4 document. And, it's important to realize that natural gas
5 doesn't need any more seismic activity than what was analyzed
6 originally. Because it doesn't take any more seismic activity.
7 None. It doesn't need any more exploratory drilling than what
8 was analyzed and what they would conduct to find oil. None.

9 Doesn't come -- the effects don't come until they're ready
10 to start building the infrastructure that it takes to move gas
11 from a deposit to the market. Yes sir.

12 UNIDENTIFIED MALE: You mentioned that seismic activity
13 out there. I know there's been some seismic activity. You've
14 seen all that pressurized equipment out there, and they say it
15 works pretty good. But have they checked the aftermath of what
16 happens to the wildlife that is on the bottom of the ocean after
17 they go through with the seismic?

18 MR. LOMAN: They do have a monitoring plan. They've got
19 ongoing monitoring -- don't know if any of us has a list of our
20 ongoing environmental studies. But they do do some monitoring
21 to see what the impacts are. Stat oil this past summer
22 conducted seismic activities in the Chukchi Sea. It was a
23 successful seismic data gathering operation. And there was some
24 monitoring activity that's associated with that. The -- every
25 year the National Marine Fishery Service, with our assistance,

1 has an Open Water meeting where the science that is in place to
2 monitor seismic activities and other activities is discussed.
3 These meetings are open to the public. Harry has attended more
4 than I have. And so have a lot of representatives from the
5 North Slope Borough. And they're heavily involved in the peer
6 review of that scientific monitoring and data gathering work.

7 And so the answer is yes. Some parties think that more
8 should be done. Some parties think that enough is being done.
9 So there's some debate that these ongoing involving that
10 activity, but it does occur.

11 MS. AHSOAK: I'd like to say about the seismic -- the
12 seismic (indiscernible). This is Heidi AHSOAK, A-H-S-O-A-K. I
13 was working for Top of the World at the time, two years ago that
14 they were doing testing. B -- employees from BP were staying
15 next door to some of the Mammal Observers. Some of the Mammal
16 Observers told the housekeepers that BP was trying to pay those
17 people to count more than what they were counting. Do you guys
18 have anybody regulating, you know -- do not how to say it.
19 There were people paying other people to say there's more
20 mammals out there than there actually are.

21 MR. LOMAN: Paying people to lie?

22 MS. AHSOAK: Paying people to lie.

23 MR. LOMAN: Paying people to not to tell the truth and --.

24 MS. AHSOAK: Correct.

25 MR. LOMAN: First I've heard that. Have you heard it

1 before? No.

2 MS. AHSOAK: And also --.

3 MR. LOMAN: But, yes, there's a written --.

4 MS. AHSOAK: And, also I don't work --.

5 MR. LOMAN: There are regulatory Agencies that are
6 interested in -- keep my phone number handy because, at least as
7 long as I work for the government, you know, I mean, you know
8 how the law works. That's kind of hearsay and whatnot, but
9 these things are best, always best, investigated right away.

10 MS. AHSOAK: Another suggestion is maybe -- keep the oil
11 companies (indiscernible) at hotels than the people counting.
12 That's one suggestion from me.

13 MR. LOMAN: Well--.

14 MS. AHSOAK: Another comment that I do have is, you know,
15 if you guys could publicize these meetings more. Because I
16 don't work -- I don't get emails from, you know, the North Slope
17 Borough, saying there is a meeting. You know, I found out
18 through Facebook.

19 MR. LOMAN: Facebook?

20 MS. AHSOAK: I found out through Facebook.

21 MR. LOMAN: You mean a friend's page?

22 MS. AHSOAK: No, I found out from -- people had
23 publicized. People had got emails about it. And I found out
24 about it and was letting everybody else know.

25 MR. LOMAN: But one of your Facebook friends?

1 MS. AHSOAK: Yes. But I shouldn't find out from Facebook.
2 I should find out from the news. I should find out from KBRW.
3 I should find out from the (indiscernible). I should not be
4 finding out -- you know, people should be finding out from, you
5 know, a valid --.

6 MR. LOMAN: We did use KBRW -- did use the Arctic Sounder,
7 we did use some obviously --.

8 MS. AHSOAK: I mean, obviously, I mean not many people
9 heard about it. Because I was telling people about it all week.
10 I just found out -- what's today Friday, I found out Wednesday.

11 MR. LOMAN: There's a phenomenon here and it happens all
12 the time, no matter what the subject is. And not just in the
13 Arctic, everywhere that at every meeting that I've ever managed.
14 That's always a complaint, and you can never do enough. People
15 are at the meeting but didn't know about it. There's a conflict
16 that's inherent there. We're going to do more. But we know,
17 even no matter how much we do, it's still not going to be
18 enough. I guess, you know, just in addition to collecting email
19 addresses on sign-in sheets at these meetings, and then
20 continually informing people of meetings in the future, which
21 we're trying to do, incorporate that, keep sending the
22 information until people say, I'm not interested anymore.

23 MS. AHSOAK: Yeah, I'd like to be on the email list.

24 MR. LOMAN: Yeah. If you give us your email address. And
25 everyone who gives us their email address will get on our list

1 and be notified as soon as we make a decision. Which still, and
2 I apologize for this because even though I'm a Manager in
3 government, I still can't control all of it. I get very
4 frustrated with how the government works too. It's never fast
5 enough for me. The only difference between you and me is,
6 government has to deal with me and my, you know, running around
7 being a 200 pound pit-bull saying hurry up, get it out. But I
8 understand that frustration. And we will do more. And I
9 apologize because I know, ahead of time, that we'll never do
10 enough.

11 MS. AHSOAK: And, also, if you could let the Captains --
12 the Whaling Captains know. You know, get all of their phone
13 numbers and, you know, all of their emails and let them all
14 know. Because I know my husband didn't know.

15 MR. LOMAN: Yes.

16 MS. STEIN: My name is Dorcas Stein, S-T-E-I-N. I didn't
17 even know what to say the only thing I can say is, when it
18 comes to you people coming up here and talking about offshore
19 and oil and gas development and stuff, that my heart begins to
20 ache. You know, from the human side of it as an Inupiat people
21 who subsist off the ocean and whale, with the walrus and
22 eating seals and fish. And we're so dependent on the ice and
23 trying to keep it clean, not broken up, not touched. It's
24 almost like you're coming in our backyard, okay, to me. And it
25 becomes very personal. Now my heart begins to hurt because of

1 the big possibilities and the great danger of what you're doing
2 way out there where our livelihood just roams.

3 Do you know, I worked briefly for Alaska's Bowhead Whaling
4 Commission when they first started to take the bowhead whales.
5 And it was just amazing, the traffic of those whales right there
6 where you're going to be. And I can almost cry just to think
7 that they're going to be bumping across aliens, you know, on
8 their turf. And, you know, we really respect the animals there.
9 I want you to know that even my heart hurts to even think of
10 something like this happening, which causes me to go to this one
11 other area of getting away from fossil fuels and stuff.

12 I really wish the government would just spend a great
13 amount to get some wind power, solar power and all this to heat
14 our homes, you know, other than using oil and gas. I don't see
15 any big efforts happening and I wish somebody would do so.

16 The other thing is, I don't know if you can talk about it,
17 but I'm sort of curious on our brothers and sisters over in
18 Point Hope and what came up from your meetings with them,
19 because they're the ones that are really going to be touched the
20 most, being right there at the Chukchi when, you know -- where
21 it's right there with Chukchi and Beaufort. Thank you.

22 MR. LOMAN: I sure can talk about what happened in Point
23 Hope, because I was there just the other day. And here's my
24 short assessment.

25 The people continue to share the same fears that you have

1 about activities that may take place. The Native Village of
2 Point Hope was a litigant in the case that is the impetus for
3 this draft Supplemental Environmental Impact Statement. And I
4 guess you could take the position that they sued along with
5 others. The Court found at least some of their assertions to be
6 correct. And so they made the Federal Agency, my Agency, behave
7 according to the Court's directions. So I guess maybe you might
8 want to congratulate those folks in Point Hope. I did, because
9 I work for a government Agency, it's not my job to get ornery
10 because people sue us. It's my job to do -- to obey the Federal
11 environmental laws appropriately.

12 And so they share concerns related to uncontrolled
13 releases of oil, like the Deepwater Horizon. They share the
14 same concerns about the industry's ability to clean up oil in
15 the event of a spill, manage ice, the horrendous weather
16 conditions of the Arctic. That was discussed. Some folks that
17 had received and read the document and talked about it -- it was
18 evident to me that they understood the document pretty well.
19 Jack Schaefer -- I think people know Jack. Jack had read it and
20 he understood the exercise of analyzing the statements of
21 missing information. He expressed concern about the fact that
22 it was limited to just those activities that the Court had
23 mentioned in their remand.

24 And then we talked about other things that kind of related
25 to what we talked about -- that I mentioned earlier with respect

1 to the reorganization of our Agency. And the creation of a new
2 Agency that will be respected by the public. There were 20
3 people in attendance at Point Hope. And there were other things
4 happening simultaneous to the meeting. For example, it was
5 Election Day. I voted in Point Hope. In the Community Center
6 they were taking in big thousand pound pieces of oil for a
7 ceremony that was starting at 8:00 that night, so people
8 sacrificed not being able to participate in the beginning of
9 that ceremony to talk with us. It was fair, frank,
10 understandable, open communication and valuable, I think, for
11 both sides, for the government officials, us, me, and for them
12 to some extent.

13 But, you know, you mentioned, how you feel when you said
14 you people come. I understand that. I come from an Indian
15 reservation in the Upper Peninsula of Michigan. And I realize
16 what it's like to have your community invaded by, in my case,
17 mining activity and other activities that have a horrendous
18 effect on the environment. But, like I mentioned earlier, my
19 job is to serve you -- serve the Administration, no matter what
20 administration it is, and try to obey Federal environmental law.
21 To be honest about informing the decision maker, no matter what.
22 I think I've done that job and I'll continue to do it until I
23 step down, which won't be that much longer, and retire and go
24 back to the Reservation where I came from, after 35 years of
25 Federal service and 20 years of military service. And I'm just

1 as proud to serve you in this capacity, as I was when I had a
2 gun in my hand and served you in combat with the military.

3 UNIDENTIFIED FEMALE: Thank you.

4 MR. BROWER: (Indiscernible) And if there are no other
5 questions coming from the audience. I was going to sit here and
6 read a statement about the Environmental Statement
7 (indiscernible).

8 MR. LOMAN: I'm going to get coffee, but I will listen.

9 MR. BROWER: First of all, my name is Harry Brower, Jr.
10 I'm Chairman of the Alaska Eskimo Whaling Commission. It's my
11 privilege to give -- provide -- to comment on this Supplemental
12 Environmental Impact Statement during this public hearing
13 tonight. I'm not sure, if this mic is on? How's that
14 (indiscernible).

15 Anyway, again my name is Harry Brower, Jr., Chairman of
16 the Alaska Eskimo Whaling Commission. I've lived here in Barrow
17 all my life, a hunter, registered Whaling Captain to the Alaska
18 Eskimo Whaling Commission -- Barrow Whaling Captains
19 Association. Anyway, this evening I'd like to read some of
20 these comments. They are not generated on my own. I've worked
21 with my staff and others and our legal counsel in generating
22 these comments.

23 This Lease Sale 193 Supplemental Environmental Impact
24 Statement is typical of what we see in the Alaska Region in
25 every environmental review. Green light to the industry, don't

1 worry about subsistence. The decisions have already been made.
2 This is just an exercise.

3 You talk about all of the industrial activities that are
4 coming and all of the impacts that are going to be happening -
5 to happen out in the ocean in the migratory paths of resources
6 that we depend on. on onshore and in our communities. And then
7 you say that there is no need for concern because of impacts --
8 will be mitigated. But you never say how they will be
9 mitigated. In the alternative, you say that none of the impacts
10 will be significant. But you never say why the impacts won't be
11 significant. I guess because the impacts won't happen to you.
12 They'll happen to us.

13 The reasons behind this Supplemental Environmental Impact
14 Statement is the Court telling the Department of Interior that
15 you left out a lot of important scientific information when you
16 did the first EIS. So you were supposed to go back and identify
17 that important information and decide how to use it before you
18 reach your final conclusions on the EIS. But you don't actually
19 consider any new information in this Supplemental EIS. You just
20 say that you have already considered all of the important
21 information and that anything else is not important.

22 Basically, you conclude, that you don't need to worry
23 about what the Court told you to do. You are trying to just
24 cover it all over the words. You say there is no important --
25 no information for how most -- all of our subsistence species

1 use the lease sale area. But then you say that information is
2 not important. No need to worry.

3 You try to get around the Court Order by saying that there
4 will be -- that adverse impacts no matter what the development
5 scenario is and no matter what the scientific information is.
6 But that doesn't work.

7 Federal regulations require you to prepare an
8 Environmental Impact Statement that is supported by evidence
9 that you have made the necessary environmental analysis. And
10 there's a quote in here in regard to this 40 CFR 1500.2. This
11 document does not meet the requirement. You are supposed to
12 provide full and fair discussions of significant environmental
13 impacts. And inform decision makers and the public of the
14 reasonable alternatives, which would avoid or minimize adverse
15 impacts or enhance the quality of the human environment. Again,
16 40 CFR 1502.1. This document does not meet the requirement
17 either.

18 There are going to be lots of adverse impacts from the
19 proposed development. You give long lists of impacts, but you
20 conclude that there is no need to worry. What do you base your
21 conclusions on? Where is your analysis? There isn't any. Just
22 like always, from your shop.

23 In terms of what your alternatives, given the many
24 unknowns and the heavy reliance of our villages on marine
25 mammals resources, it would make sense to go with alternative

1 three. This would give us a greater buffer between the
2 industrial operations and our hunting areas. This makes a lot
3 more sense than the proposed action, because you have no idea of
4 what all of the impacts are going to be, since you don't even
5 know how the resources use the habitat. On top of that, you
6 have no clear means of mitigating the impacts that do occur.

7 So it makes sense to put as much distance as possible
8 between the industrial activities and our hunting areas. You
9 need to provide a good justification for not to do that.

10 You don't tell anyone how you are going to gather the
11 baseline data you need and you ignore the data that you have.
12 Federal law requires you to use the best available information.
13 In July NMFS put out a new biological opinion for oil and gas
14 activities in the Beaufort and Chukchi Seas. You don't even
15 make a reference to that. In July you published the final
16 report for satellite tracking on the Western Arctic bowhead
17 whales for 2005 through 2009. The study shows that the whales
18 all migrating through the lease sale area. This tagging study
19 is funded by the Alaska Region published on your website, and
20 you don't even mention it.

21 You also have the report of the 2010 Tagging Study also
22 funded by the Regional Office and you don't even mention that.
23 The Chukchi Sea development will disrupt our marine mammal
24 species and their prey species. And you talk about onshore
25 infrastructure disrupting the rest of the hunting opportunities

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1 for those villages. But then you say, the impacts don't, won't
2 matter. You talk about a gas pipeline coming onshore, probably
3 at Wainwright. This will require high resolution seismic plus
4 site clearance, plus dredging and other trenching right through
5 the migratory areas. But you say there's no need to worry about
6 the impacts to the whales. What is your basis for saying that?
7 Where is your analysis?

8 You say that our villages might have to go without whales
9 and other subsistence resources. But then you conclude that the
10 impact to our people will not be significant. You continue your
11 practice of deciding that we can go without important food
12 resources for up to two years without suffering any significant
13 impacts.

14 Our bowhead whale villages have a documented need for 61
15 landed bowhead whales per year. That is food we need to
16 survive. One season without whales is very significant for us.
17 Yet, you say we can go up to two years, four seasons, without
18 this resource. You can go for two years without your major food
19 resources? At one point, in this document, you speculate that
20 we might be able to start buying western food to replace our
21 subsistence food. I'm not even going to talk about the social
22 and health impact that would go along with that. My question
23 is, where is the money going to come from? How does the family
24 in Wainwright afford \$5 for a gallon of milk, \$15 for a pound of
25 beef? How do parents in Wainwright feed their children if they

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1 can't get their subsistence resources?

2 Shell likes to come to our villages and tell everyone
3 about the jobs that are going to be accompanying all of this
4 development. Jobs for whom? Jobs for people whose main skill
5 is as a subsistence hunter? I don't think so. I think the jobs
6 they are talking about are going to go to union workers in the
7 Lower 48. That is what I see happening already.

8 When the development drives our subsistence resources away
9 and the jobs that pay enough for people to live on are all taken
10 by shift workers from the Lower 48, how do we survive? Where is
11 your analysis of that? What is your mitigation for that?

12 You are supposed to provide a cumulative effects analysis.
13 Instead you just conclude, without any support, that oil and gas
14 can be developed in the Chukchi Sea without any cumulative
15 impacts to the whales and other animals. But in your cumulative
16 impact discussions, you don't even mention the development work
17 in the Beaufort Sea, ship traffic, all of the research work
18 going on, or fishing in the Bering Sea. All of these things are
19 already affecting our migratory species. And they need to be
20 part of your cumulative effects analysis.

21 You say that there is no need to worry about impacts,
22 because they will be mitigated by National Marine Fishery
23 Service or by another Agency. But you don't say how that will
24 work. I pulled out a couple of quotes. "While the complexity
25 of how marine mammal species react to underwater and above water

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1 sound renders an exact determination of potential adverse
2 impacts difficult, abundant regulatory review and careful design
3 of mitigation measures are expected to preclude instances of
4 level A or harm take of a marine mammal and to reduce the
5 potential for level B or harassment take." Really? How is that
6 going to happen? We don't know because you don't say how.

7 Another quote is -- "No population-level impacts are
8 anticipated as a result from natural gas development and/or
9 production." Again, all I can say, really? There is nothing in
10 this document that tells me how you reach that conclusion.

11 My family depends on these animals for food. How am I
12 supposed to sleep at night knowing that you are going to get
13 ready to permit all these activities without any actual
14 mitigation in place and without any actual understanding of what
15 potential consequences of your actions? Would you be able to
16 sleep at night if it was your family's food supply that we were
17 talking about?

18 You also say impacts will be mitigated by conflict
19 avoidance mechanisms. But Shell and Conoco are not signing the
20 CAA and you are providing no support to help us get them to
21 sign. Instead, they are using their so-called Plan of
22 Cooperation. But those FOCs are nothing but a slide show and a
23 bunch of sign-up sheets. That is not mitigation.

24 Federal law requires you to provide an Environmental
25 Justice Analysis. In this part of the document you say that we

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1 will suffer a lot of health impacts, including loss of food,
2 degraded air and water quality, stress and increases in negative
3 social impacts. But then you say that there are no
4 environmental justice problems because you have decided that
5 none of these impacts are important. That is not an
6 Environmental Justice Analysis. That's just you telling the
7 decision makers in our Federal government that we don't matter.

8 I think the main take-home message from your Supplemental
9 EIS is that it doesn't matter to your Office what the impacts
10 are to our subsistence resources or to our families or our
11 communities. You have already decided to give the companies a
12 green light. To you that's all that matters.

13 These are comments that were generated through the Alaska
14 Eskimo Whaling staff and working through the reading of the
15 document and learning of what went on, needs to occur. These
16 are very serious matters to us. I hope you learn and take these
17 comments seriously. Thank you.

18 Jeff I'm going to give this to you.

19 MR. LOMAN: Thank you. Do we have another commenter?

20 UNIDENTIFIED FEMALE: Sir, I have one more please.

21 MR. LOMAN: Yes ma'am.

22 UNIDENTIFIED FEMALE: Maybe I'm loud enough.

23 MR. LOMAN: I hear you loud and clear. Judy do you hear?

24 UNIDENTIFIED FEMALE: Thank you.

25 MR. LOMAN: Thank you.

1 UNIDENTIFIED FEMALE: In light of what our Chairman of the
2 Alaska Eskimo Whaling Commission said that maybe it doesn't
3 matter because the government has already started and said we're
4 going to do it, you know. And I thought of saying it earlier
5 but I didn't because I didn't want to say it. I remember saying
6 it, how many years ago, at a meeting. But when it comes to the
7 Inupiat people up here, I think that the government needs to
8 have more respect and listen to them. I mean, you've said you
9 will be listening to us. But in the same manner, when you look
10 at the big picture of what the imperialistic attitude of the U.
11 S. Government has been in the past of taking, taking, taking in
12 land and resources. Here this whole Arctic Ocean is wide open
13 right now. And I hate to see our government have that kind of
14 mentality as they did to the Lower 48 Indians, and you know
15 about it. I think you are part Indian, you say. And, when it
16 comes to our people up here, I hope the government has more
17 sensitivity this time to our people. As few as we may be, just
18 in the thousands, compared to millions in the Lower 48, that I
19 think the moral point of it is respect for our culture, you
20 know.

21 That, I know that the government has learned a lot the
22 past many years, especially after the MMS was sued and they lost
23 and lawsuits coming in and so forth, that they're taking better
24 care. But I just don't want to see them coming in like a
25 bulldozer, no matter what people say. They're still going to

1 cut down trees and you know, drill and so forth.

2 If you can just spend more time with our people, your
3 Agency can spend more time with our people and build a
4 partnership, you know, like I know some people say maybe we
5 can't do without it -- it's got to happen. But if it's going to
6 happen, then extend your hand more to our people and say, okay,
7 what can we do? Can we work together, you know, more and
8 communicate better with us? Maybe there needs to be a Regional
9 or an offshore -- this offshore drilling and exploration. But,
10 so far it's very scattered. Our lands are vast, you know, and
11 it's scattered. But, we just want you to respect us a little
12 more. Thank you.

13 MR. LOMAN: Thank you. We are trying to extend our
14 actions to form partnerships. For example, I think probably
15 everybody knows Mayor Itta developed eight Ocean Claims
16 Initiatives. And I sure don't mean to speak for the Mayor, but
17 I have read and heard Mayor Itta speak on a number of occasions.
18 And, essentially, his position is, is that although we are
19 against offshore development, if it's inevitable, we think that
20 the government should do these eight things, Eight Ocean Claims
21 Initiatives. So, we drafted a informal Partnership Agreement
22 and we're working, or going to be working with the Borough to
23 try to enter into that Agreement and it's an Agreement just to
24 basically set some, you know, guidelines, some actions on how we
25 are going to communicate to try to address these Eight

1 Initiatives. We talked about it today. Ben and I talked about
2 it and others at a meeting today. Harry was there. The
3 progress is pretty slow. I wish I could wave a magic wand and
4 address some of these communication problems. And respect comes
5 from, at least for me, and I don't think I'm too much different.
6 You get respect when you deserve it, you know, through your
7 actions, through what you say and then, you know, how it turns
8 out in the end.

9 Harry, for example, got up and said that we failed
10 miserably to address the Court remand. We're going to see about
11 that because the Judge is going to decide. Now you heard what
12 Harry said. So it should be pretty simple. If Harry's right,
13 that Judge will kick us to the curb. I'm using terms that I
14 think everybody can understand that aren't legal terms, because
15 I'm not a lawyer. But we'll see, you know, we'll see.

16 I said earlier that, at least the draft Supplemental
17 Environmental Impact Statement, we think is a good step forward
18 at addressing the remand, although we've got comments to
19 address. And there have been some suggestions that I think will
20 add to the document. And then we go before this Judge and he
21 makes a decision.

22 So you gain respect by that proof that's in the pudding.
23 And it comes slow, and it takes patience. I know Inupiat people
24 learn patience through the subsistence activities that are
25 culturally self-defining. We had that conversation in all of

1 the villages. What does subsistence activities do besides put
2 food to the people? It teaches you how to be patient. It
3 teaches you how to deal with loneliness, sadness, and on and on
4 and on. Those are really important things to people on a very
5 personal and individual basis. And I understand that, and
6 appreciate it. Part of my job is to make people who can't
7 easily understand those things, understand them.

8 UNIDENTIFIED FEMALE: Who chose this time and location
9 advertised for this meeting? I heard about it in Facebook
10 through one person. I didn't see flyers up. I didn't see
11 anything. While the oil companies tried to butter up our
12 community through pancakes and door prizes, but when it comes to
13 the actual impact, the environmental impact on land, where's the
14 flyer? Why is there no advertisement like I had -- there's --
15 if people knew about it, more people would be here. This is not
16 a reflection of how the town feels, with the dozen people that
17 are here. If more people knew about it, they would be here.
18 Only one person at Kotzebue showed up, I heard. In fact -- I
19 mean -- talk about lack of respect and you want to know -- for
20 me it looks like the bank taking your house, and then three
21 weeks later they're going, well, how do you feel about that?
22 You guys already did it so --.

23 MR. LOMAN: Yeah, the announcement for the meeting was
24 announced on KBRW, for example. It was put in the Arctic
25 Sounder, and other media. We notified organizations, agencies,

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1 stakeholders. And we maintain an email list like -- that's why
2 we ask for emails when people sign in, and notify people that
3 way. There is another person that learned about it through
4 Facebook. I guess through your Facebook friends, who told you
5 about it as well. The Secretary of Interior has a Facebook
6 page. Maybe we should put it on there too. If you like him,
7 then you can get his notices.

8 But, I said this earlier, and I'll just say it again.
9 We'll keep doing more. But trust me, if you're at these
10 meetings with me we'll never do enough to satisfy everybody in
11 that regard. But we will do more.

12 MS. LEAVITT: I kind of got a question about -- the
13 history of Prudhoe Bay has done real well on land. Why is it
14 that we can't do more on-land stuff? And why is it that your --
15 not you -- I know you're in a position, but why is that people
16 cannot hear that it's a whole lot safer to do this exploration
17 on the land compared to in the ocean? In the wintertime,
18 cleaning up a spill during the winter time it still can be done.
19 But there is no proof -- what proof do you have that will
20 satisfy our hearts, saying that our food will not be destroyed?

21 There's been studies out there that say that our Native
22 food is considerably more healthier than the store bought foods
23 because of their preservatives that are added into the food,
24 the sugars that are added, the diabetic part of it? You know,
25 long ago we didn't have diabetes because of those carbohydrates

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1 and high blood pressure, with the food that we harvested from
2 the land. And here it's been proven that you have drilling on
3 land that is manageable.

4 I know there's people out there from the Lower 48 say that
5 we've got all this oil underground. That we're only a speck on
6 the map. And, you know, we voice and voice -- even I was here
7 in the 70s, and we had over 100 people here compared to what's
8 here now. And we didn't have the media the way we have -- the
9 way we have now. We had no internet back then. We had no
10 Facebook back then. We had barely KBRW. The North Slope
11 Borough didn't have all those internet capabilities, but the
12 word still got out.

13 I know that's a sore subject. But still, I can remember
14 when we did have over 100 people here testifying. And they had
15 to close it down because they got tired of repetitious things.
16 Now it's our turn to be repetitious, and still say the same
17 things, and still say the same things, and yet our voices are
18 still lowered. I feel that they're lowered. Because it's still
19 going to happen.

20 People are saying that there is less oil in Prudhoe Bay,
21 so they got to look elsewhere, and they're going into a place
22 where I eat from. And you're not going into the store to get
23 oil. You're going into my refrigerator, my garden where I eat.
24 Where my muktuk -- we had no muktuk -- what are you going to do?
25 You know that warms our bodies in the cold, that -- the blubber.

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1 The seal, that means a lot, with that we had with the caribou.
2 There's so many things that we get from the ocean that
3 supplement our food.

4 And I have to agree with what Harry said about it not
5 addressing of any of those things in this. Plus, with Harry
6 saying that who's going to get the jobs. I totally agree with
7 what he said. We're not qualified as MMO. You have to go to a
8 certain kind of college and get a degree to get even put into
9 those positions. You have to know certain things. We're not
10 going to be the ones getting the jobs. Yeah, you may have 900
11 jobs on the line, but it's not going to be us. We're not that
12 qualified because we're subsistence hunters. Plus, where's the
13 subsistence mitigation?

14 You know you got to re-look at what it says about it going
15 to commercial people. We're not commercial. We're subsistence.
16 So I just want to voice that. And I'm Roberta by the way --
17 Roberta Leavitt, L-E-A-V-I-T-T. Thank you.

18 MR. LOMAN: Thanks.

19 MS. DE SOUSSA: I'm Leandra De Sossa, D-E S-O-S-S-A.
20 Just wanted to mention very little actually.

21 UNIDEFINED MALE: Could we have a microphone. We can't
22 hear you.

23 MS. DE SOUSSA: Oh, sorry. I didn't have as much time to
24 read the whole document, but the Mayor of the Council of
25 (indiscernible) mentioned that there were no -- that there was a

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1 revision of the -- additionally it required by the courts, but
2 there were no impacts. And that's repeated over and over again
3 as Harry mentioned it. There is no transparency on how they got
4 to those conclusions. And I'm not sure what this is on the
5 legal matter -- how transparent those needs have to be.

6 But, there should be the data there saying, well, this is
7 what we have (indiscernible) these are how many cases and this
8 is what we are basing our conclusions on. And, that information
9 doesn't seem to be there, so if that information would be
10 included it is a (indiscernible). That should be in the
11 document to explain officially to the community and to the other
12 people who what -- what this will be mainly based on.

13 It's not transparent. It makes it very difficult because
14 we have to believe to have faith on what you're hearing. And I
15 can see that being a problem. Do you see what I mean?

16 MR. LOMAN: Yeah, like I said earlier, I know that people
17 would like to debate with me, but I'm not here to debate you.
18 With respect to --.

19 MS. DE SOUSSA: I'm not debating -- I'm just --.

20 MR. LOMAN: With respect to the issue that you brought up,
21 let me give you an example. In that document it says one of
22 these excerpts of missing information or uncertainty. There's a
23 statement in the original final EIS for Chukchi Sea Sale and it
24 says this. I can almost quote it verbatim, pretty close, close
25 enough. There is uncertainty concerning the structure of the

1 bowhead whale population, uncertainty about the structure of the
2 bowhead whale population. At that time, the time that statement
3 was made somewhere between 2004 and 2007, the Scientific
4 Committee for the International Whaling Commission was debating
5 whether or not there were multiple stocks of bowhead, Bering
6 stock, the Chukchi stock, the Beaufort stock, the Chukchi stock,
7 the Bering stock or other stocks. They since concluded, I think
8 in 2007, they concluded that there's one stock. Okay, that's
9 good, that's fine.

10 But from a decision maker point of view, an analysis of
11 the impacts we can almost talk about this in layman's terms.
12 What difference would that make to the bowhead whaler whose been
13 taking whales for thousands of years, whether it was a whale
14 that came from a -- and was a Beaufort stock or Bering stock?
15 The answer is none. It makes no difference. That's the most
16 important thing with respect to making decisions to offshore oil
17 and gas activities. If it means nothing to the people that
18 subsist from whaling, then what would it mean to the decision
19 maker to regulate, for example, an exploratory drilling project?
20 Again, none, it's meaningless. That's an example.

21 MS. DE SOUSSA: So, what's your point?

22 MR. LOMAN: I guess you can't follow it. The document
23 said, made a statement in the document. There is uncertainty
24 with respect to the population structure of the bowhead whale.
25 And the Judge said, oh well, there and 40 other pages of -- 40

1 pages of statements like that, you have to address that. What
2 does it mean? What's the context of it, et cetera? I'm not
3 going to start a debate about that particular issue. I see
4 hands going up and I don't want to debate the science.

5 MS. DE SOUSSA: That's not what I -- I just said that it
6 was not clear. And there are other Sections -- there's vast
7 information on bowhead whales, thank goodness. But there are
8 even some Sections about fish and the geography of their -- and
9 they're very limited -- they're very similar. And there is no --
10 - there's very little agreement from the scientific community
11 about how currents interact and how animals go through their
12 life cycle. And all of that is very debated for many years and
13 people try to, you know, (indiscernible) theories or those
14 processes. So how can just one environmental, this Supplement,
15 say that, well, this is all understood and there will be no
16 impact when even the process, itself, is not very well
17 understood. And it's not even explained or debated how it's
18 shown in the document. That's all I meant. But thank you.

19 MR. LOMAN: Okay, thank you. And I really -- I'm sorry I
20 probably shouldn't be upset, because I'll just get into a debate
21 and I'm not going to do it.

22 MS. WILLIAMS: This is Vera Williams again, for the
23 record. You mentioned earlier about when I talked about a
24 partnership -- a draft partnership (indiscernible) driving the
25 North Slope Borough. Will you be including a Federally

1 recognized Tribe from the North Slope, with ICAS and the Native
2 Village of Barrow and all the other Tribes within the North
3 Slope area, would this partnership -- will to be formulated?

4 MR. LOMAN: I'd like to think that we already have through
5 the mandate Executive Order 13175 that requires government to
6 government consultation. As you know, better than anybody else,
7 we had a meeting today. So that requires us to communicate.
8 But we'd like to do more so the answer is, yes. If we need to
9 include others in that agreement, or have separate agreements
10 with Federally recognized Tribes that want to establish a
11 partnership to address things and it's productive, the Federal
12 government likes to use the terms effective and efficient. If
13 it effective and efficient, we certainly are going to do that,
14 and partner with effective Federally recognized Tribes.

15 UNIDENTIFIED MALE: Could you tell me what kind of impact
16 has it had on the wildlife in Valdez ever since the oil spill?

17 MR. LOMAN: On the Exxon Valdez?

18 UNIDENTIFIED MALE: Yes, what impact has it had on the
19 wildlife?

20 MR. LOMAN: I really -- I'm not qualified to discuss it.
21 It's not relevant to this meeting other than that was an oil
22 spill.

23 UNIDENTIFIED MALE: It certainly was an oil spill. It's
24 relevant.

25 MR. LOMAN: Yeah, and you know I would just mention that

1 the Exxon Valdez didn't have to happen. It was one person who,
2 for whatever reason, didn't make a turn.
3 UNIDENTIFIED MALE: I want to know what kind of impact did
4 it have on the wildlife down there after the oil spill?
5 UNIDENTIFIED FEMALE: Is Shell going to have, make sure
6 everybody get (indiscernible) on the see, tonight.
7 MR. LOMAN: There's an abundant amount of information
8 that's been collected through the Natural Resource Damage
9 Assessment activities that all of the Trustee Agencies have
10 collected on that spill and the damages that have occurred and
11 are ongoing. And, if you leave your email address or contact
12 information, will help the people that are responsible for
13 serving you along those lines, give you that information.
14 PATRICK SUVLU: I've got one. My name is Patrick Suvlu,
15 that's S-U-V-L-U. On the purchase of Alaska, how many acres did
16 the United States buy from the Russians for purchase of Alaska?
17 MR. LOMAN: Yeah -- it's not --.
18 MR. SUVLU: And have they done any survey of natural
19 acreage of what they bought for -- is the United States
20 trespassing -- what if they didn't pay for? Are we included in
21 that acreage when they bought?
22 MR. LOMAN: I have no comment about that subject sir.
23 MR. SUVLU: Maybe that's what they need to find out.
24 MR. LOMAN: Yes sir.
25 MR. SUVLU: If the United States own the North Slope.

1 MR. LOMAN: Yes sir.
2 UNIDENTIFIED FEMALE: Yeah, that's a good one.
3 MR. LOMAN: Yes sir in the back. Yes sir?
4 MR. BROWER: You know, my name is Charlie Brower, for the
5 record. I'm kind of all -- through the magnitude of the
6 materials, you don't have available for maps and stuff where
7 that's (indiscernible) on. Your product of presentations to
8 elaborate on the subject. But the matter is, you're on --
9 waters that are in the jurisdiction that are not within the
10 State boundary. And the only people that you would have to deal
11 with on that is with the Inupiat community of the Arctic Slope.
12 Your Act in Congress did not pronounce lying into this kind of
13 Tribe for nothing. So you've got to learn to deal and accept
14 the fact that these people are Inupiat people and they're not
15 Indians and you're not -- can treat them like Indians or copycat
16 or imitate the treatment of Indians to us Inupiat.
17 When the Federal (indiscernible) collects taxes, they
18 collect that but then they have to use it for a purpose. You
19 got to get into the Federally recognized Tribes jurisdiction.
20 Our ancestral grounds from 12,000 years back, plus, you'll have
21 to learn to pay the 28, 27 percent Federal government fee to the
22 Inupiat people.
23 The Russians sold something that they thought it was here
24 when their (indiscernible) depleted they sold -- they sold for
25 quick cash revenue. The only thing they sold was the

1 jurisdiction domain where the (indiscernible) are.
2 And they never been north of St. Michaels at the time of
3 the sale. So let's get real. Don't play games with us. This
4 is a real life thing. Said there a while ago, you mentioned
5 elaborating IWC about the populations of the bowhead whale. IWC
6 came up here with the Scientific Committee in 1977 and said
7 they're there was only 947 whales. That was the first time they
8 ever been to the North Slope region.
9 On a hearsay basis, they got people to talk about it and
10 then a bullshit Scientific Study Agreement, worthless to avoid
11 where you're going (indiscernible) and then kick them out if
12 necessary. Just to prove a point. You going to put out
13 something to my people and my Tribe. You're not going to
14 respect and honor what's given to them. Some of the stuff I
15 look at here -- I want to see some results from the scientific
16 exploration that were being conducted out there. You have a
17 mediocre -- what kind of impact they did to the crustaceans from
18 the surface of the water to the sea floor?
19 And you know where to fight. Would you like to go out
20 there and swim and have to be blasted with 297 decibels of
21 noise? When a 47 decibel at 17 mile range, disrupt the bowhead
22 whale and cause him to pop up, straight up and down. Instead of
23 like this. Forty-seven decibels is -- in the water it doesn't
24 subside to 46 or 45 decibels at 200 yards. When you shooting
25 290 plus decibels in the water. they don't subside down to 245

1 unless it's past out there to ten miles or so.
2 So let's get real. You want to destroy and damage
3 everything that we stood for, based on our way of life and the
4 way we use animals in the sea, that is our garden and resource
5 for livelihood. Long before anyone even noticed there was a
6 North American continent. Some of these Indian Tribes down in
7 the Lower 48 where Asianic League or Indians at the time when
8 they first crossed, 12,835 years ago. Now you call them
9 American Indians. You forgot the government gave them the
10 recognition and productive life to them. The fact is, you doing
11 all these things to get into an area to do seismic exploration
12 and after that, the informations you gather, okay. Maybe right
13 there back where that chair is sitting is a good spot. We'll
14 drill there. And a lot of people buy stocks from that company
15 that's drilling.
16 Or let's say 20 or 30 separate families own 75 million
17 shares and they get (indiscernible) and much richer over what
18 they done. And they strike oil. We haven't Senators -- or you
19 only have one with the United States but they trample on us,
20 worse than cockroaches in some sense. A way of respecting a
21 human, you're supposed to honor people for who they are and what
22 they are. For what country you are -- we understand and know
23 that. But what country of people we are, you got to learn to
24 understand and deal with that. That -- face reality, instead of
25 living in mental insanity 99503 (indiscernible).

1 Just how badly are you willing to go for, to the people
2 that push you into these things, to conduct meetings? When
3 you're doing Environmental Impact Statements, we donate a lot of
4 information and stuff and have it printed. But it just gets
5 stored in catalogue and never been used. Nobody uses it for
6 testimony in Congress or one State, another don't even bother to
7 look at it.

8 So people who are indigenous by themselves at the rate human
9 in the culture. Disrupted, toyed with, and forced to change
10 their ways of the way they're living 99 different ways. How
11 many more ways are you going to expect us to (indiscernible) and
12 deal with something that we don't want to see, for no
13 (indiscernible). What's going to happen if that 75 reversing
14 and then we start changing you people 99 different ways? Do you
15 know the magnitude of (indiscernible) reality? That the bumpus
16 (ph) is forcing you people to do, to erase Korean (ph) culture
17 in the Arctic? Or is it that it's so many of the people that
18 have migrated from the European side, they want more of this,
19 they want more of that. And they don't care who they destroy
20 and hurt just so they could get to that resource? Is it said
21 that (indiscernible) got the United States government and
22 (indiscernible) life into a Tribe? That's being blamed by the
23 United States Department of Defense against the Indians?

24 At the same time there wasn't an Indian, you know, we
25 existed up here at the time when they thought. Alaska. You got

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1 to learn to face reality and understand them and learn to deal
2 with and cope with -- how you treat things and make things for
3 the way people have to live, the life they have to live. At
4 such a magnitude of a change that they can't let -- alter it
5 anymore. When it says, when is this going to become, I thought
6 we heard reality.

7 I enjoy my life. I enjoy being an Inupiat person. I enjoy
8 my Native language. I enjoy my culture, my music and dances and
9 my Native food. You are -- you are do that -- you going destroy
10 a lot of -- of who I am and what I am and how I live and what I
11 used to live with. Do you have something out -- do you have
12 some alternate replacement for that? Because you better learn
13 to prepare on how to make the alternative preparations on, if
14 you damage too much. And I, for one -- if women pick up their
15 own arms and have to start doing things to you people just to
16 make you understand who and where they come from, and they start
17 telling you our men have died for this and died for that and
18 they weren't even Americans. But they still -- you treat us
19 worse than dogs in some sense. Let's get real.

20 When the United States government pronounces life into a
21 Tribe it's not just a word that you can toy with and play with.
22 And if you have to face that United States Congress to make them
23 understand that, it's time to learn to understand whether you're
24 truly under mental insanity from 9305 classroom practice. Thank
25 you.

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1 MR. LOMAN: Thank you sir. Do we -- have about 12 minutes
2 for anybody else that would like to provide testimony before we
3 close the meeting at 9:30. Rosemary did you have testimony?

4 MS. AKTUANGARUAK: Yes. BOEMRE needs to obtain additional
5 baseline data to meaningfully analyzing environmental impacts of
6 Lease Sale 193. An Agency cannot comply with NEPA when data on
7 baseline conditions is so lacking, that it cannot adequately
8 determine what the environmental impacts will be. As Alaska
9 Natives and others have continually pointed out, there is a lack
10 of baseline data related to subsistence impacts, marine mammal
11 populations data, air quality, water quality, health impacts and
12 climate change impacts. The Agency must obtain additional
13 baseline data to properly analyze the environmental impacts of
14 Lease Sale 193.

15 BOEMRE cannot simply presume that adverse impacts will
16 occur under all circumstances for which information is missing.
17 The Agency is avoiding its duty to obtain missing information by
18 presuming the adverse impacts will occur for the circumstances
19 from which information is missing. But the commonality and
20 severity of the adverse impacts may vary between alternatives.
21 So the missing information is needed to make an informed
22 comparison of alternatives. For example, the Proposed Action
23 and Alternative III provides significant different sized buffer
24 zones. So the Agency must obtain missing information about the
25 impacts of an oil spill or the location of bowhead whales in the

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1 buffer zones, because it is essential to make an informed and
2 reasoned choice between these alternatives. Furthermore, it is
3 true that the impacts are all the same with all alternatives
4 then the range of alternatives is inadequate.

5 BOEMRE must rely on updated scientific information on
6 bowhead whales. An Agency may not rely on outdated scientific
7 information when analyzing environmental impacts under NEPA.
8 Here, updated information about bowhead whales is now available
9 from three new sources. One, NMFS's July 2010 Biological
10 Opinion for Oil and Gas Activities in the Beaufort and Chukchi
11 Seas. Number two, MMS's final report for Satellite Tracking of
12 the Western Arctic Bowhead Whales. And three, Quakenbush's 2010
13 study of bowhead whale movement.

14 The Agency must conduct separate SEIS to analyze the
15 impacts of the entire Lease Sale 193 on bowhead whales now that
16 additional information is known about the species.

17 BOEMRE cannot rely on compliance with additional
18 environmental laws or future NEPA analysis to avoid its duty to
19 obtain missing information.

20 To make a reasoned decision between alternatives of this
21 Lease Sale, the Agency must have sufficient information about
22 the differences in environmental impacts of each alternative
23 before it is irretrievably committed to resources -- commitment
24 to resources. The Agency cannot substitute further compliance
25 with the environmental laws or later NEPA analysis for its duty

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1 to obtain the missing information to make a reasoned decision
2 now.
3 BOEMRE must analyze the new information related to the
4 Deepwater Horizon spill. Under NEPA, Agencies have an ongoing
5 duty to supplement Environmental Impact Statements whenever new
6 information renders the original Statement inadequate. The
7 Deepwater Horizon spill has rendered inadequate the Agency's,
8 one, oil spill analysis, two, conclusions that an exploratory
9 drilling oil spill is unlikely and, three, the requirements for
10 a oil spill response plan. Thus, the Agency must conduct a new
11 oil spill analysis in a separate EIS. On behalf of the Inupiat
12 Community Arctic Slope.

13 MR. LOMAN: Thank you Rosemary. Rosemary, could you let
14 me have that written comment?

15 MS. AKTUANGARUAK: I can get it with the statement of the
16 original county (ph) of ICAS and that's what they usually like
17 it handled, so I'd have it ready.

18 MR. LOMAN: Okay sure. Thank you very much.

19 MS. AKTUANGARUAK: I'd like to give a statement now on
20 behalf of myself.

21 MR. LOMAN: Okay.

22 MS. AKTUANGARUAK: We've commented for decades in these
23 processes. We've brought out decades of concerns. Our
24 grandparents started these processes. They worked with us in
25 trying to build ways that we might (indiscernible) some these

1 impacts. We worked for many processes with the Agency before
2 you changed your name, to try to build ways that might limit
3 some of these actions. But the enforcement of any our efforts
4 never (indiscernible) out. The impacts were left upon us.
5 I had to spend another day working with Tribal governments
6 from Louisiana because they wanted to learn what they can do to
7 help their area. We've gone through impacts to subsistence. As
8 you say, we can survive that. Families can survive loss of
9 subsistence what that would cost. The cost is tremendous when
10 you build social impacts that -- that's generations, in their
11 health, in their wellness, in their social ability to address
12 these problems, in their willingness to continue to participate
13 in these processes.

14 When grandparents had gone to their grave, and the
15 concerns that we have promoted for generations have never been
16 enforced -- have never been built into the process to give us
17 the hopes that our traditional and cultural (indiscernible) in
18 areas that are going to be changed by oil and gas, will still be
19 there. When you cause disruptions of multiple species to
20 communities, you just dropped generations of families, working
21 and living in these areas. When you don't have the species to
22 teach your children how to cut up these items, it's difficult to
23 do so when you have to use only pictures. It's very difficult
24 to tell the stories of our land usage when the changes to the
25 areas that are being discussed or changed, and the animals don't

1 use them the same ways. So our families don't hunt in these
2 same areas the way the stories were told for generations,
3 disrupts the learning curve for the future generations.
4 It affects our lives. It affects our whole beings. And
5 we continue to share these things. But we have cultures that
6 were never recognized in the Gulf area. Tribes that were never
7 recognized, and yet their livelihoods have changed forever.
8 Watching those people down there pulling out boats in the
9 opening of fishing season because they knew there was not going
10 to be something to harvest. Having the Tribal members say that
11 the government has said their food is safe, when they take the
12 shrimp from the water and they break the head off and there's
13 oil inside of it. And they can wipe it on a tissue to show.
14 And yet our government is saying that food is safe.

15 They did the same thing in our State with the previous
16 spill. The learning curve was not there. And you talked
17 earlier about how the Exxon Valdez created that law. But you
18 forgot there were two other devastations that occurred with
19 that. With the (indiscernible) event in India with their
20 chemical spill, there were three devastating events. Before, we
21 learned from that process. We didn't learn from Exxon. We'd
22 better learn from the Deepwater Horizon.

23 And don't get out here and try again because, just in a
24 short period of time, we had the GS2 spill and you said to us --
25 not one drop would be spilled in Exxon. And yet, 200,000

1 gallons still was spilled. And then at Prudhoe Bay, with alarms
2 going off for four days that were ignored.

3 That's not reassuring to us that anything you have put in
4 your documents has any cretisan (ph) of being implemented.
5 Then we had the fire in our own refinery in Fairbanks. And you
6 had still the explosion in Texas and still the Deep Horizon.

7 There is many changes that must occur. You still have
8 many of these same people authorizing documents in these
9 processes that were authorizing these same processes that led to
10 the devastations that happened to those loss of lives. We still
11 have many, many problems. You don't have the personnel to
12 enforce existing regulations. And you have exemptions to air
13 and water quality standards in our States still occurring as
14 part of the continued comments of health impacts affecting the
15 breathing of people. Twenty babies being Medi-vac'd out, ten of
16 them put on ventilators was not enough. A cost for our Village
17 but yet we endured that cost. We still have a better job there.

18 That's not acceptable to take and promote development at
19 the cost of tradition and culture and the health of our people.
20 These are not acceptable. They won't be tolerated. We have
21 many more cultures that are going through the devastation and
22 are asking for our help in Alaska because we have learned some
23 things. And they have so much more to learn in their process.

24 Having to tell people how to try and heal their
25 communities because they're going through loss that they were

1 told would never happen. And yet, every day of their
2 traditional and cultural lives or not to be seen for decades to
3 come and generations to become. In these spill plans, they say
4 in (indiscernible) burnings. But, yet when they burned in our
5 State they didn't even inform the nearest community. And all of
6 the people got sick. And you put regulations to limit some of
7 these things out there, but it's different in our environment.

8 These emissions in these air, in our environment, in our
9 times, when we're breathing them, with our cold environment, the
10 impacts are much more damaging to us. When you study this
11 impacts at 70 degrees, we don't have any days at 70 degrees.
12 You need to study it at our impacts, at our temperatures, at our
13 currents. They studied air quality currents with a goal. But,
14 yet still, the concerns from the communities down there were
15 still expressing. There's real concern here, the odor is really
16 strong, people are getting sick. And yet, the effort of our
17 government to monitor this process was not adequate to get the
18 notification in the documentation to prevent the worst
19 exposures.

20 Where's the respite for their pregnant women and children?
21 They're continually being exposed to the generations of growth
22 that is being affected. How can we help them in this process
23 because they have continued exposures? Using the dispersants to
24 put peoples into a toxic chemical spill at the benefit of
25 industry, reduce the way that those communities could observe

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1 and try to build protections, to put the booms out in areas.
2 Because when you mix the oil into the water column, you can't
3 see it coming in with the tide. And the waves come in it's
4 below a few feet of levels and the oil is still coming ashore.
5 There's no protection. There was no enforcement to maintaining
6 boom that was laid out. There was no real good way of looking
7 at how the boom was being placed.

8 You could tell that some areas had good support to get
9 boom placed. Other areas had absolutely no support to get any
10 boom placed. But there wasn't even maintaining up there. Boom
11 that was placed was just free flowing. You're not doing any
12 protection. That important critical habitats site for the
13 pelicans, there was boom out there, but the same issue, no
14 maintain, no protections. The adequacy of that boom placing was
15 non-existent. Those pelicans still got impacted with the oil
16 from that.

17 We watched the dolphins come up through the sheen, the
18 birds diving into the oily water, fish jumping out gasping for
19 air. We can't watch that happen down there and take these
20 discussions up here. That's so devastating for us to be damaged
21 from the efforts from the Exxon Valdez to have it re -- happen
22 with it and there's more information with the Korean spill.
23 They studied health impacts from day one. Where's our studies
24 from all these different things? We don't have that data.
25 Nothing was done to help us get some of these health impacts.

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1 If anything, it helped to hide what the health effects
2 were from that spill. All those workers that went out there to
3 respond. All those workers that got so sick from working the
4 dispersants. They died so fast and are no longer here to
5 comment, but their children are. The children watched their
6 health deteriorate until they were no longer able to be active
7 in their (indiscernible) lives. Those children grew up with
8 that loss, not only of just their family, but of their
9 traditions, their culture and the knowledge of what's normal.
10 We can't let that happen here. There is too much at risk.

11 We're a whaling culture. We're important to live in the
12 water and do the life of the lifestyle there. We need it for
13 our bodies. We need it for the health and longevity of our
14 communities and our region as a whole. That's what we -- what
15 we are. Dollars per barrels are not worth those costs.

16 MR. LOMAN: Thank you Rosemary. Yes.

17 MS. ITTA: I have a few comments. My name is Natasha
18 Itta, I-T-T-A. My question is, if we went into your home, you
19 drank a certain kind of coffee or you drank a specific soda and
20 that's all you drank. If there was a specific food, if you're a
21 vegetarian, if you had any allergies. You couldn't eat gluten.
22 You couldn't eat sugar. You needed something for you to sustain
23 yourself due to the life. If someone went into your house and
24 took that and told you that you could never have it again, what
25 would you do? You would fight the fight until you were not able

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1 to fight anymore, so that you can have what it takes to survive.

2 If I went into your house and told you, that cup of
3 coffee, you were never allowed to have it. You will never have
4 a cup of coffee ever again and if anybody else around you sees
5 you having that, they'll take it away. That affects your day-
6 to-day life. If that's how you survive, with that cup of coffee
7 or that caffeine or whatever, if someone eliminated that from
8 your way of life, you would die.

9 Seriously, if someone said, you can't have water. That's
10 how we are. This is our place where we survive. We go out. It
11 not only affects the ocean, it affects the land. The land -- we
12 get snow. We get rain that feeds the berries, the caribou, the
13 ducks, the geese, everything. So if you're saying that we can't
14 hunt, and you're going to exploit oil in our waters, that
15 affects the way of life and the way we live. And for you to
16 say, you can't go out and go hunting whales, but I could still
17 have my cup of coffee every day, I don't think so. That's not
18 acceptable.

19 That's not something that I would -- I just had a son --
20 he may never get to go whaling because you might affect the
21 water that he's going to be able to go whaling in. That's
22 craziness. I want to know that my children are going to grow up
23 in a community where they can go out and do the things that
24 their ancestors did from day to day. I grew up -- I got
25 relatives that -- I for one go whaling. I don't go out in the

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1 water, but I go out and I help harvest the whale. I cook it.
2 I cut it. I disperse to everybody that comes and wants some.
3 And for you to tell me that you are going out into the water and
4 tell me that you're going to go drilling, and go exploring and
5 all of this, but you can sit in your lofty offices with your
6 \$600 chairs, your \$5,000 computers and taking your private jets
7 and chartering planes to the little villages that you never tell
8 anybody that you're meeting with, and telling them they're not
9 going to be able to do that? That's not acceptable. That is
10 not something that I want to see. I want to know that, from
11 this generation to the next to the next, that we will still be
12 the people that our people were before us, hunting, camping,
13 boating, fishing every day.

14 If there's a spill, tell me that someone is not going to
15 go out in the dead of February when it's 50 below where there's
16 85 miles an hour winds and the wind chill is a 100 below and
17 you're going to tell me that someone is going out and go scoop
18 this oil up? We live in this weather. There's some days we
19 avoid this weather. We sit inside and pray that it gets nice
20 the next day. But for you to reassure us and tell us that
21 someone's going to go outside in this weather. This is how
22 bright it gets in December. And if you're telling me that
23 someone is standing outside watching the oil and telling me that
24 someone is going to be there to capture it, to fill it all up
25 and put it somewhere -- put it somewhere in a container and ship

1 it off after it's touched the oceans? That's not something I
2 want to hear.

3 I want to hear that you're going to do whatever it takes
4 to keep this from happening. Because I've seen many, many
5 impacts, not on just America, but of other countries too. And
6 so I want to know that this needs to be -- all of this
7 information needs to be shared. And I had no idea about this
8 meeting. So I want to know that you guys are going to do
9 whatever it takes to make sure that everybody's aware of what's
10 going on. You can't just say, oh well I can't comment on that.
11 I don't comment on that. That's not acceptable. We're asking
12 you questions and you answer it. Thank you.

13 MR. LOMAN: Thank you. We're past 9:30. Anybody who
14 hasn't spoke that would like to speak? Otherwise, sir we're
15 going to give you the last word.

16 MR. BROWER: For the record, Charlie Brower
17 (indiscernible) again. A lot of the money that's appropriated
18 and approved for spending by the United States Congress has
19 affected us up here in our country since they first started
20 drilling in 1944, in the early 40s at Umiat. And from those
21 drilling activity days, we are still seeing clean-up of
22 contaminant in volumes that are mind boggling today. And I'm
23 for one, I'm not doing -- what with -- when they're drilling up
24 there, the air -- they haven't been there and they left the
25 drilling. They stopped drilling in Umiat in the 50s.

1 And we're still getting money appropriated for clean-up in
2 Umiat for something that was once (indiscernible) like anti-
3 corrosion. But the United States Congress passed a law in 1970
4 declaring transform fluid very caustic to human health. Just
5 last May a DEC report that they found open containers up here
6 PCB and 12 (indiscernible) by six inch. And some of those
7 containers leaked out into a slough, a lagoon that drains into
8 the Koval (ph) River drainage. And they uncovered and removed
9 another 32 containers of the same thing that had been sitting
10 there for a very, very, long, long time. Considering what the
11 United Congress does in 1970, thinking it as a very caustic to
12 human health. And they're taking their time removing or
13 locating dangerous carcinogenic chemicals that they had left up
14 here.

15 And it gives my mind, the impression that we are offshore
16 drilling and they suddenly start to look like cities out there.
17 There's no telling how much contaminant you're going to leave
18 out there and say we depleted the oil. Hell with all the oil
19 rigs that are sitting out on the water. In the late 70s and
20 early 80s there were some caribous that were tagged for
21 satellite tracking. The next number of them would break the
22 caribous and much -- many of them were not very far from the
23 Alaska Pipeline. The pregnant caribous would not get - they
24 would stay over a mile away from the pipeline. The corrosion
25 inhibitor that they using to prevent rust and corrosion inside

1 the pipeline was so carcinogenic to human health that an animal
2 can detect it by smelling it over a mile away from the pipeline.
3 And the pipeline is from all the way from Prudhoe Bay to Valdez
4 and that's a big coating with corrosion inhibitor material.

5 And the only way you can remove that carcinogenic
6 corrosion inhibitor -- that pasting into the inside wall of the
7 pipeline needs to be removed section by section and replace it
8 with a new one. And then use an alternative corrosion inhibitor
9 that's not carcinogenic to human health. But the oil companies
10 don't keep us in the inside stories. They keep it to
11 themselves.

12 The reason why the gentleman asked about the Valdez oil
13 spill, because all the oil comes from the North Slope. And we
14 want to know if that oil that was that was in a danger had
15 certain percentage of that carcinogenic material. That would be
16 one of the main reasons for asking a question on how did it
17 affect. What kind of impact did it have to that oil and the
18 substance that they used for corrosion inhibitor? Those things
19 -- those two separate things are not talked about or mentioned
20 by either -- all parties. I worked in Prudhoe Bay. I've done a
21 lot of oil injections. I have to know how to approach an
22 inhibitor injections from the wellhead to the gathering place
23 and then it flows from gathering place to a pump house.

24 Pump station number one, pump station number two, pump
25 station number two, pump station number three until it reaches

1 Valdez. And they are allowed to pump x number of fluids with
2 corrosion inhibitors. And that's something that oil companies
3 got to do with that. And that raises a big question on the back
4 of mind. If they had a large volume container stored in that
5 platform that blew up in the Gulf of Mexico district, what
6 happened to all that corrosion inhibitor material that was
7 there? That they reduced to prevent rust from the pipelines
8 that they used to pour it into if they're going to be pumping
9 into an oil saver.

10 So, we ask questions because it affects people in the way
11 they live. And if they're harvesting food from the ocean, they
12 want to know what goes into the water. The same way we would
13 not rather see that kind of stuff up here. Thank you.

14 MR. LOMAN: Thank you sir. Thank you very much for coming
15 this evening. We appreciate your comments. And if you leave
16 your email or mailing address, we will include you to the list
17 to get you information about this project and any other project
18 that we have authority or responsibility over in Alaska's OCS.

19 Again, thank you for taking your time on a Friday night
20 and providing comments. And have a good weekend. Bye-bye.

21 UNIDENTIFIED FEMALE: Thank you for coming and hearing our
22 voices. But still come again, but we'd like to see you more.

23 (off record 9:30 p.m.)

24
25

TRANSCRIBER'S CERTIFICATE

1
2 I, Judy Bradshaw, hereby certify that the foregoing pages
3 numbered 2 through 85 are a true, accurate and complete
4 transcript of the Bureau of Ocean Energy Management Regulation
5 and Enforcement Public Hearing regarding the Environmental
6 Impact Supplemental Statement Relating to Chukchi Sea Sale 193
7 held in Barrow, Alaska on November 5, 2010, transcribed by me
8 from a copy of the electronic sound recording to the best of my
9 knowledge and ability.

10
11 Dec. 13, 2010
12 Date

Judy Bradshaw
Judy Bradshaw

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Bureau of Ocean Management Regulation and Enforcement

Public Hearing

Environmental Impact Supplemental Statement
Relating to Chukchi Sea Sale 193

November 9, 2010

BOEM Multi-Purpose Room

Anchorage, Alaska

VOICE CHECKED/CORRECTED

BOEM TEAM MEMBERS:

Jeffery Loman, Deputy Regional Director
Michael Haller, Community Liaison
Michael Routhier, NEPA Coordinator
Bob Peterson, Senior Geologist
John Callahan, Public Affairs Officer
Mary Cody, Wildlife Biologist
Sharon Warren, Program Analysis Officer

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PROCEEDINGS

(On record at 7:06 p.m.)

MR. LOMAN: My good friend from Point Hope has entered the room, so we can get started. Hi, Earl.

Good evening and thank you very much for taking your time to come attend this Public Hearing. This is the sixth and final Public Hearing that we've held.

My name is Jeffery Loman. I am the Deputy Regional Director for the Bureau of Ocean Energy Management Regulation and Enforcement, formerly known as MMS.

The purpose of this hearing is pretty straightforward. As most of you know, our Agency prepared an Environmental Impact Statement back in 2007. And the purpose of this Environmental Impact Statement was to analyze the effects to the human environment under the National Environmental Policy Act for an oil and gas lease sale in the Chukchi Sea, Sale 193. This map describes the results of that sale, because the Agency held that sale in February of 2008. And a total of 487 leases were issued for almost \$2.7 billion. Can you hear me back there? Okay, good. Somebody was trying to send me a message.

We were challenged by a number of parties. And the case went to the Alaska District Court. And the Court, in July of this year, issued an Order and remanded the Agency to do a couple of things. Analyze the effects of natural gas production, because the Agency did not do that. And these

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1 leases have incentives associated with natural gas.
2 The other thing the Court wanted us to do was to address
3 about 40 pages, in the Plaintiffs' Exhibit 129, of missing
4 information or uncertainty, try to address the context of that
5 information in the context of informing the decision maker, the
6 decision to hold this oil and gas Lease Sale. This missing
7 information is something the Court said, find out if it's
8 obtainable and if the cost of obtaining it is exorbitant.
9 And, so, when we got that remand, like any National
10 Environmental Policy Act litigation, a court will say, do your
11 environmental assessment right, or do more. And we prepared a
12 Supplemental Environmental Impact Statement to address this
13 court remand.
14 And the purpose of this hearing is driven by this Federal
15 law called NEPA, is the acronym, and it's a Sunshine Law. It
16 requires us to do everything out in the open to produce a draft
17 document, which is here tonight, if you haven't seen it. We
18 still have copies available.
19 By the standing room only attendance, and I apologize for
20 that, we weren't expecting to have standing room only attendance
21 tonight. We're not so sure what drove that, but it doesn't make
22 any difference, we're delighted and inspired that you've taken
23 an interest and, obviously, share our passion for protecting the
24 ocean and enhancing our country's energy. It is a extremely
25 important aspect of Alaska's economy. And it's an extremely

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1 important issue to the Alaska Natives who live in the Arctic.
2 We were there all week last week, starting in Kotzebue,
3 continuing on to Point Hope, Point Lay, Wainwright and Barrow.
4 And we met with folks in each one of those communities at public
5 hearings. And we held government to government consultation
6 meetings, as well. So, I have pretty much explained what the
7 Court asked us to do. Sharon, do you have anything to add to
8 that?
9 MS. WARREN: Just that the timeframe, as Jeffery said,
10 what the Court asked us to do. There's also -- copies out
11 there. There's a September 2nd Order from the Court outlining
12 the deadline. And the District Court Judge thought it would be
13 reasonable for us to make the effort to have this final EIS
14 completed by January 21, 2011. And, after that date, it would
15 be filed with the Court. The Administrative Record would be
16 filed with the Court on that date. The Plaintiffs will have an
17 opportunity to review the final EIS, as well as the
18 Administrative Record and file briefs with the U.S. District
19 Court on March 21, 2011. So far, that is the schedule that was
20 outlined in the September 2nd Court Order by Judge Beistline.
21 So, that's all.
22 MR. LOMAN: Thank you Sharon. Mike Routhier is our
23 colleague who worked extensively on the draft Supplemental
24 Environmental Impact Statement. Mike, could you tell our
25 attendees about that document?

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1 MR. ROUTHIER: Sure thing. The Judge's remand was
2 specific in what he wanted us to do, a little bit of more NEPA.
3 UNIDENTIFIED MALE: Could you speak a little bit louder?
4 MR. ROUTHIER: Oh, I'm sorry. The Judge's remand was
5 fairly specific in what he wanted us to do. He wanted a little
6 bit more NEPA and there were bits that he wanted done correctly.
7 He found deficiencies in some of the parts. In order to
8 accomplish what the remand required, we elected to do a
9 Supplemental Environmental Impact Statement, which allowed us to
10 do a pretty thorough analysis of the issues. And, also
11 incorporate some public process. It let us go out to visit the
12 communities on the North Slope. It let us have this meeting
13 here tonight.
14 As Jeffery stated, there were a couple different
15 components of the Judge's remand. The first component was the
16 requirement to analyze the potential environmental impacts of
17 natural gas development and production.
18 Now, in asking the analysts who work with us, the
19 scientists who do our analysis, we couldn't just ask them to
20 analyze development and production generally, we needed some
21 more specific information from them to analyze. What we needed
22 was a feasible scenario, a reasonable scenario that talked about
23 what kinds of developments would be necessary. How things would
24 actually work. So, to get guidance on what the natural gas
25 development and production would entail, we consulted with our

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1 Resource and Economic Analysis Section. These are Geologists
2 and experts in the oil and gas field. And they helped us --
3 they provided us with a scenario that the analysts could then
4 take and analyze. And I'm going to introduce Bob here, from
5 that Section, to speak a little bit more on that.
6 MR. PETERSON: Thanks. Hi, I'm Bob Peterson, Chief of the
7 Resource and Economic Analysis Section. As Mike pointed out,
8 one of the key things that their group needed was something
9 specific -- can you hear me okay?
10 AUDIENCE: No.
11 MR. PETERSON: What they needed was something specific to
12 analyze. And, again, when the Judge came back, he said, we
13 hadn't analyzed. But keep in mind, this was put together in
14 2006-2007. At that time, we didn't see gas as reasonably
15 foreseeable. But in our leasing instrument, we did give an
16 incentive in barrels of oil equivalent, which could be either
17 oil or gas. And so the Judge wanted to see an analysis of gas.
18 In our final Environmental Impact Statement that we had
19 completed, we looked at a scenario of an oilfield of
20 approximately a billion barrels in size. Well, what we did is,
21 added to that accumulation, we certainly see possibilities of
22 this in the Chukchi Sea of a billion barrels of oil and an
23 associated accumulation with that of two and one-half trillion
24 cubic feet of gas.
25 We thought this was the most reasonable scenario to begin

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1 our development. Oil is a much more valuable commodity than
2 gas. We did not feel it was reasonable for a gas only
3 accumulation to be economically viable. But in the case where
4 you had oil that could be developed, and that provide a lot of
5 the infrastructure in place then for then a gas development, we
6 thought that was the most reasonable scenario to have both -- to
7 analyze both an oil and a gas case on the environment.

8 So the first stage in our first EIS, we looked at an oil
9 development of a billion barrels in the Chukchi Sea, a bottom
10 grounded -- sea floor grounded structure, a oil pipeline to the
11 shore. From that point at the shore, taking off across NPRA on
12 an onshore oil pipeline to the Trans-Alaska Pipeline over near
13 Prudhoe Bay.

14 It's important to note that this oil would probably begin
15 about 12 to 15 years from today, assuming drilling would take
16 place tomorrow. This would be, still, a number of years out
17 before oil production began. Sometime during that period of
18 time, the infrastructure for gas production would begin to be
19 developed. And that would include the gas pipeline to the
20 shore, gas facilities at the shoreline. And then along the same
21 right-of-ways as the oil pipeline, a parallel gas pipeline
22 across NPRA that then would connect to, well, maybe Denali,
23 maybe AGIA. We don't really know. But it would be something
24 coming from the Prudhoe Bay area to the south. This would take
25 place after about 15 years of oil development. So there would

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1 be a transition stage where we had both oil and gas, with ever
2 decreasing oil. And then for the last 10 years of the field
3 development, you would have only gas coming off of this offshore
4 Chukchi Sea development. And you could be looking at a project
5 that would have, maybe, a 35 year lifetime.

6 It is important to, I think, mention, of course, the
7 offshore oil and gas pays royalties to the U.S. Government. But
8 also, a lot of the -- in fact, all of the onshore facilities
9 could be \$4 billion worth of onshore infrastructure would be
10 taxable by the State. with a percentage of that going to the
11 North Slope Borough in property tax. And this does add up.
12 Currently the North Slope Borough's getting about \$250 million a
13 year in property tax income from existing infrastructure in the
14 Prudhoe Bay area. So we did now have a concrete scenario that
15 could be analyzed by the people up in the Environmental Group
16 and the staff that Mike was working with.

17 MR. ROUTHIER: Yeah, that's correct. So, basically, we
18 passed around a scenario that Bob's office provided us with.
19 And this was reviewed by BOEMRE's team of scientists and
20 analysts. Scientists included Marine Biologists, Economists,
21 Cultural Anthropologists, a variety of disciplines. And each
22 analyzed the potential impacts of the natural gas development
23 and production to those various resources. And that's contained
24 in the heart of the document.

25 Basically, you break it down into -- well, first we

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1 summarized what the original EIS said about the oil development
2 and production, just to give people context. Then we
3 specifically addressed the natural gas development, so
4 installation of pipelines and things of that nature. And then
5 in a separate section we had analysis of production activities.
6 And we just organized that for clarity, basically. But that
7 basically took care of the first item of the Judge's remand.

8 And that brings us to the second and third concerns in the
9 remand which, both, basically pertained to his holding that we
10 were deficient in our dealing with incomplete information.

11 Within NEPA and its implementing regulations, there's
12 certain protocol that Agencies must follow if incomplete
13 information exists or is identified. We didn't do a good enough
14 job of that the first time. So, we do it again and we try to do
15 it the right way. To ensure that we did it the right way, we
16 developed a pretty systematic logically progressing analytical
17 tool that, basically focused our analysis on the precise words
18 of the regulations.

19 For instance, the first step was asked whether the missing
20 -- or the incomplete information was relevant to reasonably
21 foreseeable significant adverse affects on human environment.
22 So, we worked with our analysts to determine what was relevant
23 to these types of impacts. If a particular item identified in
24 the Plaintiffs' exhibit or during our subsequent review,
25 indicated that an item was not relevant to that type of impacts.

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1 we simply noted that and moved on to the next item. If we found
2 that the item was relevant to that specific type of impacts,
3 then we'd progress through the next step in the analysis. That
4 asked whether the incomplete information is, quote, essential to
5 a reasoned choice among alternatives. And, basically, our
6 scientists and our management got together and we tried to hash
7 out what was really essential and what wasn't.

8 All the findings are memorialized in Appendix A of the
9 Supplemental EIS. And that's the type of thing that we
10 appreciate your comments on, whether we did a sufficient job of
11 doing that analysis.

12 MR. LOMAN: Thank you, Mike. In our meetings with the
13 communities along the Arctic Coast and in Kotzebue, we did get
14 some good constructive comments that will help us put together a
15 better, final Supplemental Environmental Impact Statement. We
16 also got some good suggestions from Tribal Leaders, leaders of
17 the Native villages on how to improve our Agency. Because we
18 are in the process of going through a major reorganization,
19 which is the impetus for the name change. And we expect to have
20 yet another Agency created here in the next couple of months,
21 the Bureau of Safety and Environmental Enforcement, with the
22 goal -- to the primary over-arching goal to restore the public's
23 trust in what we do.

24 So, are there any questions about anything we've talked
25 about, the reason we're here tonight about this environmental

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1 law or any kind of question that I can answer before we get to
2 the public comment period? Yes sir.
3 TOM: Who are the Plaintiffs?
4 MR. LOMAN: The Plaintiffs are the Native Village of Point
5 Hope, the Inupiat Community of the Arctic Slope, and a number of
6 environmental advocacy groups. Sharon has, I believe, an Order
7 that lists all the Plaintiffs. Can you give it?
8 MS. WARREN: Yes. The Plaintiffs in the case, Native
9 Village of Point Hope, the City of Point Hope, the Inupiat of
10 Arctic Slope, Red Oil, Alaska Wilderness League, Center for
11 Biological Diversity, National Audubon Society, Natural
12 Resources Defense Council, Northern Alaska Environmental Center,
13 Oceania, Pacific Environment, Sierra Club and the Wilderness
14 Society.
15 And the Defendants in this case is the Bureau of Ocean
16 Energy Management Regulation and Enforcement, previously
17 Minerals Management Service, the Secretary of the Interior. And
18 the U.S. Fish and Wildlife Service was sued concerning the
19 Dangerous Species Act, but that claim, through the Court, was
20 moot, because the Fish and Wildlife Service redid -- updated the
21 biological opinion was a subject to the litigation, so that --.
22 The Interveners in the case is Shell Gulf of Mexico,
23 Incorporated, Conoco Phillips Company and the State of Alaska.
24 MR. LOMAN: Any other questions? Tom?
25 TOM: Yeah, did you try and incorporate any of the lessons

1 learned or was this -- from the Gulf spill? Or, was this just
2 strictly addressing court actions?
3 MR. LOMAN: It sets out to address the remand, court
4 actions.
5 TOM: So is there going to be any subsequent change to the
6 analysis regarding, you know, the ability to mitigate -- as we
7 saw, with such a miserable failure in the Gulf?
8 MR. LOMAN: Well, here's the beauty of our system. It is
9 multi-step, multi-phased. And the environmental analysis, in
10 this case, was to hold an oil and gas lease sale. And some of
11 the things that would happen after a lease sale are seismic
12 exploration. That requires additional environmental analysis or
13 exploratory drilling. More environmental analysis if a viable,
14 economically and recoverable resource was found. And they went
15 into a development scenario and production scenario, more
16 environmental analysis would be required for each and every step
17 of the process.
18 There are long lists of things that have already taken
19 place. Some of these things are voluntary. Industry has made
20 changes on their own, because of the Deepwater Horizon spill.
21 And some things are being mandated by other authorities that the
22 Department of Interior has. So, the long and short of it is --.
23 TOM: There will be a whole new set of EISs required down
24 the road.
25 MR. LOMAN: More environmental assessments, or

1 Environmental Impact Statements and other authorities that, in
2 the addition to, the creation of a stand-alone, regulatory
3 Agency to oversee industry's activities that we have been
4 involved with making recommendations we believe will be
5 successful in full measure at restoring the trust of the
6 American people in what we do. Any other questions? Yes,
7 Michael.
8 MICHAEL: You said that, in your documentation, that
9 nearly \$140 million has been spent on pre-leasing studies. Do
10 you have a handle on how much money in total has been spent to
11 this point on studying?
12 MR. LOMAN: Environmental studies in the Arctic is
13 probably approaching about \$400 million by our Agency alone.
14 Industry spends tens of millions of dollars, just in the short
15 time that I've been with the Agency, to do their own science in
16 developing baseline information and monitoring of what
17 activities have taken place.
18 Most recently, Shell and the North Slope Borough entered
19 into an agreement by which they will work collectively to do
20 even more baseline science. And, the posters on the wall, with
21 the little chart on an easel back there -- when the meeting is
22 over, I invite anyone who's intellectually curious about the
23 amount of scientific information that we base our decisions on,
24 to take a look at this list of environmental studies that have
25 been conducted and that are currently being worked on. So there

1 is a substantial amount of information, scientific information
2 to base these kinds of decisions on. And, I can tell you very
3 briefly that in the case of the decision to hold a sale in the
4 Chukchi Sea, the decision maker did ask some hard questions.
5 The decision maker wanted to know if the people in the
6 communities along the Arctic were confident in industry's
7 ability to clean up an oil spill. And whether or not industry
8 could clean up an oil spill. These are questions that are a
9 little different than the norm, inside the Beltway. They
10 require answers that someone might not like. But, this process
11 under the National Environmental Policy Act and this meeting
12 that we're having right now are all part of informing the
13 decision maker. And, so, when and if the decision maker asks
14 how people view certain things, it's our job, as employees of
15 this Agency, to tell them the truth. And so that's our job, and
16 we're proud to do it. Tom.
17 TOM: Jeffery, can you comment on whether, and if so, when
18 the Agency would submit to the State of Alaska revised Coastal
19 Consistency Determination, under the State's Coastal Management
20 Program?
21 MR. LOMAN: For this particular Supplemental Environmental
22 Impact Statement?
23 TOM: Right.
24 MR. LOMAN: We talked about that this past week. We have
25 not, because we just got back.

1 UNIDENTIFIED MALE: What's the question?
2 MR. LOMAN: Question is, whether or not we will consult
3 with the State, under the Coastal Zone Management Act and get,
4 would essentially be, a confirmation or re-confirmation of
5 consistency. We have not had the chance to hold those
6 discussions with the State because we just got on the ground the
7 other day. And, we had to prepare for this meeting. But we
8 will. And we will get back to the North Slope Borough with
9 that. Yes, ma'am.
10 UNIDENTIFIED FEMALE: How long will public comments be
11 accepted for the EIS statement?
12 MR. LOMAN: November the 30th. Apparently, it was --
13 November 29th is the date. But somebody sent somebody something
14 that said, it was November the 30th, so, with the great powers
15 bestowed on me, I have extended the comment date one whole day.
16 And hopefully that will work for you. This is a
17 straightforward, easy to comprehend document and matter. And
18 that should do it. Jeff, yes.
19 JEFF: You mentioned several times the decision maker.
20 Who's going to be the decision maker on this, on this EIS?
21 MR. LOMAN: Well, you know, that -- it's the Secretary's
22 shot to call. And the Secretary has he ability to delegate
23 down. I can tell you this, since the Deepwater Horizon
24 incident, decisions on doing things in the Arctic with respect
25 to oil and gas exploration, seem to be of great interest to the

1 Secretary, and even the President, as one could easily
2 understand. So, at a minimum, it will be made by the Secretary
3 of Interior unless he decides to delegate it to the Assistant
4 Secretary of Land and Minerals Management. Yes.
5 MR. HARBOUR: Question on process. It looks like we may
6 have several score of people here interested in testifying.
7 What are your rules? Are we going to have a certain time limit?
8 And how long are you going to allocate? Or are we going to stay
9 here as long as it takes for everybody to be heard? Or are you
10 going to put a limit on tonight?
11 MR. LOMAN: He's moving me along. Yeah, let's get into
12 that. Because we do have a long list. Thank you sir. A long
13 list of people that do want to testify. And so, I counted that
14 list and did the math. We have 'til 10 p.m. and that gives the
15 78 people about two minutes each. I know how these work,
16 because I do this for a living. Some people will change their
17 mind because somebody's already said something that they said.
18 And that's okay.
19 What I'm going to do is, I'm going to call the names in
20 the order of the sign-in sheet. Just to let you know, so you
21 can get in the batter's box, we're going to start with Mr. Taft,
22 and on deck will be Mr. Gilbert. So, if you could move that
23 way, we can get started straight away.
24 And then I would ask that everyone, insomuch as possible,
25 that you summarize what you want to say. And if you have it in

1 writing, I will take it from you and make it part of the record.
2 The only real rules that we have is that we respect each other
3 and be courteous. We talk just loud enough for our Court
4 Reporter, Judy, to understand you. There's no sense to let our
5 emotions get the best of us.
6 So, without further ado, I know we have more questions,
7 but I'm not going to take them because we do have to get into
8 the testimony. I'd be happy to answer any questions, burning
9 questions that you have, after the hearing is closed. Mr. Taft,
10 you have the floor.
11 MR. TAFT: Thank you sir. Thanks to you and your
12 organization for all the hard and good work that you do for this
13 State
14 UNIDENTIFIED MALE: Can't hear back here.
15 MR. TAFT: Is that okay?
16 MR. LOMAN: That will be picked up by the Court Reporter,
17 loud and clear. You may not be able to hear the person.
18 MR. TAFT: I'll do my best.
19 MR. LOMAN: Okay, do your best.
20 MR. TAFT: Yeah, --
21 REPORTER: Could I just ask that you tell me your name so
22 I can put it on the record?
23 MR. TAFT: Yeah, that's my first line. My name is Maynard
24 Taft. I'm a Partner in a small business, Hawk Consultants. We
25 provide supplemental personnel to the oil and gas industry here

1 in Alaska. We're an Alaskan company, founded here in 1985.
2 Last year we lost 50 employees due to the state of the oil
3 industry at this time. We also are a member of the Alaska
4 Support Industry Alliance, which is an organization representing
5 500 member companies, and their 35,000 employees.
6 We believe the OCS should be made available for oil and
7 gas exploration and development for these following reasons.
8 The United States is in a vulnerable position related to oil
9 energy consumption. Oil imports have risen about 20 percent in
10 the last few years and the U.S. local production has declined by
11 14 to 16 percent. We import over 59 percent of our energy as
12 reflected in oil. Where and what is our energy policy?
13 Opposition to oil and gas exploration and production here in
14 Alaska impacts here in Alaska, the Lower 48 and is a threat to
15 nation's security.
16 Even if we were to get approved tomorrow, OCS production
17 may not be available for some 6 to 10 years, when you consider
18 the permitting and contingency plans and different
19 (indiscernible). Can we accept a vulnerable and subservient
20 position relative to our energy needs? Do you think that the
21 American people will accept a damaged economy, stand by while
22 their elders freeze up in New England? Wars have started over
23 problems less than this. We must be always in a position of
24 strength, energy independence, flexibility, sustainability, when
25 it comes to our national security. Energy is the foundation of

1 our independence and the strength of the world.
2 Seventy percent of Alaskans, including the Alaskan Native
3 community, support environmentally, responsible development.
4 Shell is working closely with the local community in Barrow and
5 understands -- and incorporates concerns of the Indigenous
6 Alaskan people. We are citizens of this State, all of us in the
7 oil industry. We care deeply about the environment and its
8 citizens. Remember, even oil companies are made up of people.

9 I recall an experience when I was working in Barrow in
10 1972 to '74. We were doing a cleanup project at Umiat. And
11 workers came back and said, they expressed their amazement at
12 the amount of oil seeping out, just naturally seeping out under
13 the tundra, up there. And I commented to them, the oil
14 companies have a more stringent oil policy than Mother Nature.
15 Alaska needs the jobs, revenues and oil production. And the
16 U.S. needs its energy sources for our nation's security.
17 Exploration and production is a win, win, win -- revenues for
18 the government, energy independence for the nation and jobs for
19 a stagnant economy. Thank you.

20 MR. LOMAN: Thank you Mr. Taft. I have your written
21 statement. I appreciate your comments. Mr. Gilbert you're up
22 next. And, for the Mayor of Anchorage, Ms. Schubert, I hope
23 you're still here? Yes. Ms. Schubert -- Stacey, you're on
24 deck. Mr. Gilbert, you have the floor.

25 MR. GILBERT: My name is James Gilbert. I'm the President

1 of Udelhoven Oilfield Systems Services. We're a 40 year Alaskan
2 company.

3 The goal of Lease Sale 193 was to produce oil from the
4 Alaska OCS and boost domestic production from potential world-
5 class energy deposits. OCS production has the potential to
6 refill the Alaska pipeline which is now operating at one-third
7 of its 1988 peak flow.

8 Oil and gas production resulting from Sale 193 will occur
9 under the world's highest safety and environmental standards.
10 Activities will be governed by stringent lease stipulations
11 identified in the environmental impact studies. Numerous
12 mitigation measures, including seasonal operating restrictions,
13 will minimize potential impacts. There has never been a blowout
14 in the Alaskan or Canadian Arctic that resulted in a oil spill.
15 Thirty wells have been drilled in the Beaufort and five in the
16 Chukchi, all without incident. And these wells were drilled
17 utilizing 1980s technology, which is far behind what's used
18 today.

19 According to a University of Alaska study, new OCS
20 production in Alaska would provide an annual average of 35,000
21 jobs in Alaska, with a total payroll of more than \$72 billion
22 over 50 years. And that's over \$18 billion in income tax
23 dollars, alone.

24 Demand for energy is continuing to rise and the U.S.
25 requires continued development of America's oil and gas

1 resources, as the nation transitions to new energy sources for
2 the future.

3 I urge you to move forward with development of the 193
4 lease area. Our nation needs it. Alaska needs it. And we, as
5 Americans, need it also. Thank you very much.

6 MR. LOMAN: Thank you Mr. Gilbert. I have had a couple of
7 requests here to -- thank you -- ask that the speakers face,
8 stand and face the audience. And I think our Recorder will be
9 able to hear.

10 UNIDENTIFIED MALE: Can they sit and turn around?

11 MR. LOMAN: If you really want to hear, they have to stand.
12 Do you mind?

13 UNIDENTIFIED FEMALE: No.

14 MR. LOMAN: Thank you. Thank you Stacey.

15 MS. SCHUBERT: Good evening, and thank you for allowing me
16 the opportunity to testify. For the record, my name is Stacey
17 Shubert. And I am the Inter-governmental Affairs Director for
18 Anchorage Mayor Dan Sullivan. He asked me to apologize that
19 he's not with you tonight in person. But it's because he's
20 currently occupied at our Assembly Meeting where our lawmakers
21 are addressing the 2011 City budget. As Mayor Sullivan's
22 jurisdiction spans nearly 2,000 square miles and almost 300,000
23 people. I am testifying on his behalf to oppose any further
24 delay of development of Alaska's offshore oil and gas resources,
25 and to encourage you to affirm expeditiously, Lease Sale 193, as

1 held by the U.S. District Court for Alaska in 2008.

2 The economic security of our nation is in peril,
3 jeopardized further by the potential significant loss of jobs
4 and local, State and Federal revenues that the de-facto Arctic
5 offshore moratorium is imposing.

6 Your Agency has estimated that Alaska's OCS has up to 29
7 billion barrels of oil, compared to the 16 billion barrels of
8 oil already produced on the North Slope since 1977. The Trans-
9 Alaska Pipeline system has the capacity to ship more oil to the
10 domestic market. It is currently operating at only one-third of
11 its peak flow. And Alaskans need the jobs that will be created
12 by the development of offshore oil and gas. Further, Alaska's
13 OCS may hold 209 trillion cubic feet of natural gas, further
14 positioning, both our State and this nation for reduction in
15 internationally imported supplies of these resources.

16 As an Alaskan who understands the Arctic's extreme
17 temperatures and remoteness, and the importance of this industry
18 to our State, Mayor Sullivan has personally met with Shell
19 Alaska Vice President, Pete Slayby (ph). The Mayor appreciates
20 the company's need for a decision by your Agency in the next few
21 weeks to move forward with its 2011 plans that involve moving a
22 drilling ship and other infrastructure into place.

23 Surely, there will be opponents to drilling in Alaska's
24 OCS who refer to the Deepwater Horizon incident in the Gulf of
25 Mexico. The last time Mayor Sullivan testified before your

1 Agency on August 26, 2010, in front of Director Michael
2 Bronwich, he said, quote, The action to suspend drilling
3 announced by Interior Secretary Ken Salazar on July 12, 2010,
4 was likely a prudent move, given what we did not know about the
5 Deepwater accident. However, now is the time to move forward.
6 Mayor Sullivan also said, nearly four months ago, quote, We
7 must, as a nation responsibly move forward with domestic
8 offshore energy production to meet our needs by building a
9 robust and inclusive OCS leasing program that includes both the
10 Beaufort and Chukchi Seas. He urged BOEM to continue its work
11 to evaluate regulatory structures that improve safety and spill
12 response, while simultaneously making sure any changes are
13 appropriate to make certain that offshore energy production can
14 be done responsibly, taking heed to protect the environment,
15 workers, American consumers and our economy.

16 Again, now is the time to move this leasing program
17 forward. We have learned much from the Deepwater incident, and
18 we know that drilling in the shallow Arctic is far different
19 from drilling in the deep Gulf, including overall geology, well
20 design and pressure. More than 250 studies have been funded in
21 the Arctic in the past decade, with the bulk focused on the
22 Chukchi and Beaufort Seas. We know that there's never been a
23 blowout in Alaska, or the Canadian Arctic that resulted in an
24 oil spill. Five wells have been drilled in the Chukchi and 30
25 wells have been drilled in the Beaufort, and all without

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1 incident. What's more is that these wells were drilled in the
2 1980s when technology was not nearly as advanced, as it is
3 today.

4 One tenant of Alaska's Constitution that we hold dear is
5 that we will control our own destiny. Article 8, Section 1,
6 establishes the policy of the State to develop our resources by
7 making them available for maximum use consistent with public
8 interest. Access to Alaska's assets is fundamental to our
9 national security interests. If the U.S. Government doesn't
10 provide a reasonable, regulatory environment, the multi-national
11 companies who are in a position to invest, will do so outside
12 our country and, therefore, funneling hundreds of millions, even
13 billions of dollars to outside economies that likely do not have
14 the stringent regulatory framework to support America's
15 interests.

16 Through our actions with Shell, including a steadfast
17 commitment to prevention, and a rigorous review of Alaska Spill
18 Response Plans during recent legislative hearings,
19 Mayor Sullivan has the confidence that now is the time to move
20 forward with OCS drilling. We have, for too long, delayed our
21 country, of Alaska's available resources. Our economy will
22 benefit from an annual average of 35,000 jobs with a total
23 payroll of more than \$72 billion in the next 50 years. Other
24 States will benefit from enhanced private sector demands made
25 possible by exporting Alaska's high volume of oil and gas

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1 resources.

2 What if that risk is more delay and overburdens and
3 regulation, significant market disruptions that are likely to
4 lead to price volatility and higher prices for American energy
5 consumers and for Alaskans who are so dependent on oil and gas
6 revenues to make our economy tick. To that end, Mayor Sullivan
7 encourages action by Congress to provide States with a fair
8 share of revenues derived from production (indiscernible) to
9 drive revenue and help direct a more responsive path forward.

10 I'd like to reiterate Mayor Sullivan's opposition to any
11 further delay to development of Alaska's offshore oil and gas
12 resources, and to encourage you to expeditiously affirm Lease
13 Sale 193.

14 MR. LOMAN: Thank you.

15 UNIDENTIFIED MALE: Point of order.

16 MR. LOMAN: Ms.Beardsley. Sit down sir.

17 UNIDENTIFIED MALE: No, point of order.

18 MR. LOMAN: No, sit down sir. No, sit down sir. Sit
19 down.

20 UNIDENTIFIED MALE: I am sitting down. But I feel I'm
21 obligated (indiscernible).

22 MR. LOMAN: You will sit, please, thank you. Ms.
23 Beardsley. And Mr. Danson on deck. Again, please, in the
24 effort to allow people enough time to speak, please summarize
25 your statements, if you can. We appreciate it.

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1 MS. BEARDSLEY: My name is Betsy Beardsley. I'm the
2 Environmental Justice Program Director for Alaska Wilderness
3 League. For the record, I'm a life long Alaskan, born and
4 raised here, deeply rooted in this State. I have a child and my
5 mother-in-law is here in the audience to support me, so I'm not
6 an Outside Environmental Extremist.

7 We're at an important crossroads right now to the Arctic
8 Ocean. And while I'm glad to see that BOEMRE is here, holding
9 this public meeting to learn about the issues at hand, I am for
10 the Agency to listen local voices, to improve its process in
11 working with the community, and to gather the necessary
12 scientific data and make decisions based upon sound science.

13 The process, so far, has been bureaucratic, rushed and
14 technical, to the detriment of capturing local voices on these
15 issues. These voices do not only have the most knowledge about
16 this pristine wondrous place, but also stand to lose the most,
17 if the risky aggressive development proposed by Shell Oil and
18 others is allowed to move forward.

19 For example, BOEMRE needs to improve outreach to the
20 community. In October BOEMRE released a 300 page document on
21 its draft FEIS for the Chukchi Sea and an (indiscernible)
22 community hearing was ten days after releasing this document.
23 This timeline does not give communities adequate enough time to
24 digest the hundreds of pages of vital information affecting
25 their communities. BOEMRE can do a better job in engaging

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1 communities in a transparent and fair process.

2 Also, very little is known about the icy waters of our
3 Arctic Oceans. And the necessary science is still being
4 gathered. For this reason, the Obama Administration and two
5 Federal Judges suspended all drilling activities in the Arctic
6 earlier this summer, with the requests for necessary and missing
7 scientific information. The draft FEIS for the Chukchi should
8 address the missing scientific information. Instead, the Agency
9 dismissed the need to collect missing science and, at this time,
10 its potential negative impact on entire species of Arctic
11 wildlife.

12 We hope that the process could be similar in the Beaufort
13 where Agency would release a new draft FEIS that would base
14 decisions on sound science, such as the research that your
15 sister Agency, the U.S. Geological Survey, is currently working
16 on. And, also, that you take into account the lessons learned
17 from the BP oil spill.

18 We learned through the tragedy in the Gulf of Mexico that
19 there were significant problems with the way that oil and gas
20 development in our nation is managed. In fact, BP's massive
21 mistakes in the Gulf have shown the spotlight on something we,
22 in Alaska, have known for years, that the oil industry cannot be
23 trusted with our precious natural resources. BP's track record
24 on Alaska's North Slope has been terrible, averaging more than a
25 spill a day over the past 15 years. Just last week, the

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1 independent investigative news group, Pro Publica, released
2 BP's internal report that found that some pipeline walls in
3 Alaska's North Slope are 80 percent corroded and could rupture.
4 And while Shell has not yet build a track record in the
5 Arctic Ocean, the gross inadequacies in their plans for drilling
6 have been exposed by Federal Court after Federal Court and don't
7 do much to build our confidence that they will be any different.
8 What's more, there is extremely limited response capacity to
9 deal with a spill in the Arctic Ocean. Simply put, there's no
10 way to clean up a spill in the Arctic icy waters.

11 Bottom line is that, until we feel confident with the oil
12 industry's ability to drill safely and responsibly, no drilling
13 should be allowed to move forward in the Arctic Ocean. This is
14 a great time to have a time-out, a pause so we can wait for this
15 necessary scientific data to be collected, so that, if we are
16 going to drill in the Arctic Ocean, that it's done right and
17 that local communities are involved, from the beginning.

18 This lawsuit, that's brought us here today, was filed by
19 the Inupiat Community of the Arctic Slope, among others. The
20 Inupiat Community of the Arctic Slope is the Regional Tribal
21 government for the entire North Slope, representing eight
22 villages along the North Slope and then 1,000 of Inupiat Tribal
23 members that live there. I think we need to listen to them and
24 their concerns. Thank you.

25 MR. LOMAN: Thank you Betsy. Mr. Danson. And, on deck,

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1 Mr. Steiner.

2 MR. DANSON: I am not from Alaska and I am an
3 Environmentalist but I hope I'm not an extremist. My name is
4 Ted Danson. I'm on the Board of Directors of Oceana which is an
5 International Ocean Advocacy Group, conservation group, with
6 offices in Juneau, Alaska.

7 I went to Prudhoe Bay, at the invitation of oil companies,
8 about 20 years ago because, I was on the opposite side of the
9 fence, trying to keep Occidental Petroleum from drilling in
10 Santa Monica Bay. We became friends and they flew me and a
11 friend of mine up there. And we agreed to disagree. But we did
12 find ways to keep oil out of the system by creating a recycled
13 used motor oil program. So I firmly believe in working with oil
14 companies, when you can.

15 I was also able to go to Barrow about five days ago. And
16 I met with Mayor Itta and saw somebody in the middle of this
17 conversation. Somebody's whose entire -- the people he
18 represents have been lifted up economically oil money into a
19 place where they can live in a much more sustainable way. And
20 at the same time, their spiritual and cultural life depends on
21 whaling, the bowhead whale. And they feel that that may or may
22 not be in jeopardy from this drilling. But they feel that the
23 science -- well, let me now speak for them.

24 Oceana now feels that, what you need to do with so much at
25 risk, is make sure that the planning and the science is accurate

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1 so that you are not putting these people at risk.

2 We feel like draft that's come out is, actually, basically
3 saying, yes we know we don't know this certain amount of
4 science. But it's okay that we don't know that science to go
5 ahead and start drilling. We disagree. We feel that that would
6 be a mistake. I also feel that it's a bit of a mistake that the
7 train has left the station and -- before you've done the basic,
8 the base science. And by that I mean, really knowing how the
9 entire ecosystem works, and is dependent on all, you know, on
10 the food chain. That you start leasing things and then say,
11 you'll do the science, as you go along the way, each step of the
12 way. Whereas, if you'd done the science to begin with, maybe
13 you would have said, you know, don't drill here, drill there.
14 It has, you know, less impact on the environment. And you can
15 still get your oil but you can do it in a safer way over here.

16 So our suggestion is, to stop this draft. Do the real
17 science, the base science. And it would take, maybe four or
18 five years to do that at \$20 million a year, but would well be
19 worth that effort. And, we also have many pages of comments and
20 suggestions that will be submitted later. Thank you for this
21 opportunity.

22 MR. LOMAN: Thank you Mr. Danson. Mr. Steiner. And
23 coming up after Mr. Steiner, Doris Hugo? Yes.

24 MR. STEINER: Thank you very much to son of MMS for
25 holding the hearing. I also want to thank Mr. Danson. This

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1 guy's the real deal. He's not just a Hollywood celeb that steps
2 into an issue and then walks back to Hollywood. He's been
3 involved in ocean conservation issues for decades. And I
4 certainly commend him for that. Thank you.

5 There were hearings like this prior to TAPS in which
6 people said, it's important for jobs, for energy and don't
7 worry, there will not be one drop of oil spilled in the Prince
8 William Sound. We all know that the -- what's wrong about that,
9 at this point. There were hearings like this in the Gulf of
10 Mexico prior to deepwater drilling. Obviously, we know what the
11 fallacy in that logic as well, right now.

12 This is a high risk gamble. I realize that politics are
13 against us in Alaska. Most of the people in this room and
14 probably, most of the people in Alaska want OCS drilling. We
15 get that. The problem is, who shoulders the risk and who gets
16 the benefit? The people of the Arctic Slope certainly shoulder
17 the majority of the risk. And the environment of the Arctic
18 Ocean has most of the risk. So we have to be conscious about
19 that.

20 My suggestion would be, Alternative II in the FEIS, which
21 is, no action. But realizing the political realities, might not
22 line up with that. I would suggest, then, an Alternative III-A.
23 And Alternative III is the 60 mile deferral corridor one against
24 the beach. And would ask that it be suspended for a year while
25 further risk analysis and risk assessment is conducted.

1 We don't even really know the full causes of the Deepwater
2 Horizon at this point. And it's ludicrous, one, to lift the
3 moratorium. The Federal Court just suspended the rules that
4 were issued by the Department of Interior. And now it's a
5 complete free-for-all in the Gulf of Mexico.

6 I don't think the industry has it together. The Agency,
7 with all due respect, has shown that it does not have it
8 together, providing Federal oversight. So we're all, you know,
9 we're all on the same team here, I think. We all need to have
10 responsible energy. But the way we've been doing it, obviously,
11 has been chaotic and hasn't worked, so we need to drop back for
12 a year or two, do the risk assessment. Do the blowout
13 prevention systems that are much better than what we have right
14 now. And do the response planning.

15 We know that oil spill response doesn't work. It has
16 never, ever, ever worked anywhere, period. We need to disabuse
17 ourselves of that notion, period. And, particularly, in broken
18 ice situations in the Arctic. If an oil spill were to happen
19 right up against -- freeze up, there'd be virtually nothing that
20 could be done about it under the ice.

21 Should the Alternatives go forward, which I suspect they
22 will, regardless of what we say here tonight, I'd ask that an
23 Arctic Regional Citizens Advisory Council be a stipulation, and
24 a legitimate, independent fully funded one that includes the
25 Village and Tribal governments, not necessarily the Regional

1 Corporations. That's the latest draft of the Bill reads. And I
2 would also ask that real time drilling monitoring be conducted
3 by Federal Engineers and better inspections be conducted on the
4 rigs.

5 And lastly, I guess I'd just like to say that I and many
6 of my colleagues in the conservation and scientific community
7 have been somewhat disappointed so far in the Obama
8 Administration. 00 I'm sure a number of people in here have been
9 disappointed, as well, for different reasons. But I think it's
10 time for the Administration to start governing and stop
11 campaigning. And the same for Congress. The gridlock can't --
12 is not helping anyone.

13 So, we need a sustainable energy policy. I don't think
14 this is where we're going to get there.

15 MR. LOMAN: Thank you -- Doris you're next.

16 MS. HUGO-SHAVIGNS: Good evening I am Doris Hugo-Shavigns.
17 I am a Tribal Member of Barrow and the Arctic Slope. I am
18 submitting my written testimony for the public hearing regarding
19 confirmation of the Chukchi Sea Lease Sale 193.

20 SEIS provides ample information and analysis to support an
21 educated decision for support of Lease Sale 193. Chukchi Basin
22 holds enormously massive amounts of oil and natural gas which
23 our nation, State and local residents need now. We must stop
24 relying on foreign oil. Onshore oil and gas exploration and
25 development has afforded many benefits to my people of the

1 Arctic Slope region and we're in an economic crisis. Revenues
2 are dwindling with the decline of TAPS and fewer companies
3 investing in on shore exploration.

4 There is no alternative to off shore exploration for the
5 people of the North Slope in terms of economic development and
6 stability. Good paying jobs are on vast decline and families in
7 rural Alaska are at the forefront of the nation's economic
8 crisis. Many residents, including some in the North Slope, live
9 in third world conditions in inadequate homes not suitable for
10 the Arctic.

11 Oil and gas revenues has provided education, health and
12 social services and numerous other facilities such as proper
13 sanitation services, roads, bridges, airstrips and other
14 critical infrastructure needed for the well-being of our
15 communities.

16 I personally had my higher education paid for and
17 graduated from the University of Alaska Anchorage with a
18 Bachelor's degree thanks to oil and gas dollars provided to my
19 region. This also includes the hundreds of other North Slope
20 Inupiat that continue to receive scholarships through endowments
21 and foundations established with oil and gas dollars. It is not
22 a handout, it is a hand up to help our people live in the ever
23 changing world. Even subsistence hunting costs money, money
24 that comes from jobs that are on the decline. Offshore
25 exploration and subsistence hunting co-exist.

1 It would be a major disservice to my people and to the
2 State of Alaska if BOEM rescinds the leases allowing a de facto
3 moratorium to continue, which will do more harm than good. I
4 strongly urge you to affirm Lease Sale 193 and commence with
5 necessary permits to allow development of these important energy
6 resources without delay.

7 MR. LOMAN: Thank you. Mr. Banks for the Governor of
8 Alaska. And Ms. St. John on deck.

9 MR. BANKS: Thank you. My name is Kevin Banks. I am the
10 Director of Oil and Gas at the Department of Natural Resources.
11 And I'm here on behalf of Governor Farnell and I thank you all
12 for this opportunity to testify.

13 The State of Alaska supports Alternative IV in the
14 Supplemental Environmental Impact Statement on oil and gas Lease
15 Sale 193 in the Chukchi Sea. And affirming the Sale 193 as it
16 was held in February 6, 2008. As all are aware, that Sale
17 yielded \$2.6 billion in successful bonus bids from some of the
18 most experienced offshore oil companies in the world. Bidding
19 behavior such as this is undeniably a huge endorsement of the
20 scientific opinion by both BOEMRE and the USGS in their
21 assessments of the resource potential in the Chukchi Sea. I'll
22 try to be brief for you all.

23 Now, almost three years after that sale, in which time
24 these companies would have had the opportunity under less
25 litigious circumstances, to begin exploration in earnest, the

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1 Secretary must revisit this decision. We're here today because
2 the U.S. District Court in Anchorage remanded the Sale 193
3 decision to BOEMRE. The Court asked the Agency only to revisit
4 three aspects of the original decision.

5 Now, while the State would have hoped for a ruling from
6 the Court that would have upheld the Lease Sale, Judge Beistline
7 certainly did not deliver a complete victory to those who would
8 want to bar any oil and gas activity in the Chukchi Sea. He
9 said, quote, This does not necessarily require the Agency to
10 completely redo the permitting process. In all other respects
11 the Court finds Defendants, that is BOEMRE, have complied with
12 NEPA.

13 As for natural gas development, the first of the three
14 issues raised by the Court, there can be little doubt that this
15 will occur in association with and incrementally to oil
16 development. BOEMRE correctly concludes the natural gas
17 development would merely extend the life of existing plays and
18 infrastructure and build new facilities within the previously
19 disturbed areas. For this reason, environmental impacts are
20 described with words as localized, temporary, minor.

21 Should there be a large-scale gas release into the
22 environment, the environment would be affected temporary to
23 short term and at a negligible to minor level. While impacts
24 may occur because of direct operations, over-flights, marine
25 transits, pipelines, et cetera, the Agency says that these may

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1 be avoidable through avoidance and mitigation. And the impacts
2 on the human environment from natural gas development are
3 described with the comments in the SEIS as, no major impacts are
4 expected for Alaska Inupiat Natives.

5 These conclusions about the environmental impacts of
6 incremental natural gas development, combined with the
7 conclusions already made by the BOEMRE and essentially affirmed
8 by the District Court in the original Sale 193 FEIS means the
9 decision to go ahead with the lease sale has met the
10 requirements of NEPA.

11 The Agency's analysis of the second and third issues
12 identified by the Court is encyclopedic and rigorous. It was
13 our impression that the number of instances in the original Sale
14 193 FEIS where BOEMRE identified incomplete or unavailable
15 information, indicated that the care of the scientist at the
16 Alaska OCS Region took to avoid exaggerated and polemic
17 statements. On the other hand, the Plaintiffs, before the U.S.
18 District Court, presumed that, in spite of exercising an
19 abundance of caution that the Agency had somehow erred in
20 pressing forward with a lease sale, as if it were completely
21 ignorant of the environmental impacts.

22 The Court didn't go so far as the Plaintiffs. Instead the
23 court recognized that the Agency be given deference in meeting
24 the requirement, and we believe that they have done so
25 comprehensively.

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1 Lacking a crystal ball or the prescience of our Creator
2 should not condemn all human endeavors. Obviously at this stage
3 in the process, we can be sufficiently informed about the likely
4 impacts of selling oil and gas leases in the Chukchi Sea. Later
5 we can address what we need to know to authorize exploration
6 activities. When uncertainties exist, everyone understands that
7 we must act with caution. The State of Alaska believes we need
8 to act now.

9 To wrap up, in deference to all of you, State of Alaska
10 has consistently argued that oil and gas development in the
11 Arctic OCS is an essential component of the future of our
12 industry and our State economy. It will contribute to
13 sustaining our livelihoods and our varied cultures. Often lost
14 in the debate about OCS development, it's a simple fact that
15 when we fail to develop our own resources, we export our
16 nation's wealth through deeper trade imbalances and costs to
17 maintain our international energy security.

18 Failure to develop our domestic resources exacerbates the
19 impacts on the environment and other parts of the world where
20 values about environmental protection and the laws that minimize
21 the impact of industrial activity are non-existent.

22 We compliment BOEMRE for the work they've put into this
23 SEIS. And we believe that it provides more than sufficient
24 support for the decision to affirm the February 6, 2008 Sale
25 193. Thank you very much.

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1 MR. LOMAN: Thank you, Kevin. Okay, I sense the
2 frustration. So I'm going to ask one more time to please keep
3 your statements down to two minutes. It's appreciated by a lot
4 of people. Thank you.

5 MS. ST. JOHN: For the record, my name is Jeanine St.
6 John. And I'm here representing an Alaska company that many of
7 you now, Lynden. We represent a privately held company that has
8 over 500 employees in the State Alaska.

9 And I'm going to keep my comments extremely brief. I'll
10 leave my written comments. What I'd like to say is that we have
11 testified at all of these public hearings on everything related
12 to this lease sale. It's gone on and on and on. You can see
13 all the studies, the scientific studies that have been done. I
14 believe -- we believe that people understand that oil and gas
15 Development has to be done responsibly. And we appreciate the
16 fact that companies have had the patience to go through this
17 process. However, it's disheartening to go on and on and on
18 through this process.

19 So we urge quick expeditious activity. And let's move
20 forward. We want to keep our employees employed. And we know
21 that you guys all want a good Alaska economy.

22 So, that's it. .

23 MR. LOMAN: Thank you. Thank you very much. Mr. Kendall.
24 Mr. Pratt right after Mr. Kendall. Mr. Kendall. Well, Mr.
25 Pratt, we have an empty seat for those that are up next.

1 UNIDENTIFIED MALE: Well, I see the same faces in different
2 places. Earlier tonight I rose in the back to call a point of
3 order, a point of inquiry to Mr. Loman, here. Again, I see one
4 injustice, one inconsistency, one contradiction, one hypocrisy
5 after another, to limit us to two minutes. But those people
6 that are special, get a longer time. It appears to me that your
7 society is decaying. It is unraveling. It is aberating (ph) at
8 a scope and scale the likes of which I have never seen before.
9 It almost appears to be an insect high colony like design, which
10 if you take the money out of the picture, it appears to be a
11 natural formulation of revolution.

12 My concern is this, you can do all the oil you want. But
13 we deserve an equal amount of time for us to evolve as a
14 society. Alaska's a very, very special place, ladies and
15 gentlemen. It is an intersection of the likes I have never seen
16 before. And to put that into some criteria as opposed to a
17 philosophical and theoretical position, a ten by ten by ten
18 block of water, which is really a hydrogen body, they use water
19 as a tricked up term, so that it disconnects you from some
20 greater understanding, irrelevancy. But that body of water
21 weighs 31 tons, a ten by ten by ten block of water, 31 tons.

22 You have the Cook Inlet out here, the Knik Arm area. You
23 have one of the world's highest tide flows. You have three
24 incoming rivers. You have the capacity to go into that Inlet
25 overnight and generate huge amounts of clean energy called in-

1 harmony energy. You have the chance to make your residential
2 sector in the Valley, in Anchorage and Girdwood to be all
3 electrical residential, one of the first areas in the world.
4 You have a chance, if you do that, to literally launch the new
5 age which is going to be energy based.

6 And instead of sharing that moment with some of these
7 companies which were some of the most influential in the world,
8 to bring (indiscernible) to Mr. Loman to be able to hold over a
9 hearing for two minutes at a time, instead of being able to have
10 a three or five day, these companies portend levels of influence
11 I've never seen the likes of before.

12 And what happens is this. Instead of them joining us to
13 make this a very special place to evolve our society, to show
14 that two paradigms can exist simultaneously, and win out, you
15 now, in a fair mode, they continue to evade accountability.
16 There is not going to be anymore (indiscernible) Alaska ladies
17 and gentlemen. And if you look at the rational factors and all
18 the data outside of those people who want to mindset you, by
19 occupation, you will realize that technology is coming unleashed
20 like I have never seen before in my lifetime.

21 Carbon and the fossil fuel distribution network system of
22 associates, they have so maligned, they have so connived and
23 contrived the markets across, just not America, but the planet
24 in all reality. That all sectors are now looking to fail. The
25 only way to come back is for the true free market enterprise to

1 push back with new and in-harmony designs.

2 These oil companies know this. And let me give you an
3 example. I'm going to do a little something here that hopes to
4 connect you or unfold you. There is no such thing as water. It
5 is an ancient archaic and distracting term. When you send that
6 child over to get you a glass. If you do water, you may as well
7 put that child in a cardboard box and bury him. You need to
8 send him over to get you a glass of hydrogen with oxygen.

9 And when he says to you, mom or dad, what is hydrogen, you
10 can explain to him that the ocean is a complex hydrogen body, a
11 compound of various particulates and partnerships and life
12 forms. It's almost another dimension and to reach into it.

13 A river is a hydrogen body. A lake is a hydrogen body.
14 When you drink that hydrogen, your body makes electricity and
15 sends you a synaptic impulse. When you have two synaptic
16 impulses there about, you have what we call a State of Being
17 because you can contrast data. You are maintained by a State of
18 Being by hydrogen, ladies and gentlemen.

19 It is oxygen under which you die -- pardon me? I didn't
20 see a timepiece. But out of respect for your distinguished
21 guests, here I will do that.

22 I'm not sure how you summarize it in a moment of such
23 wonders. Well, I am angry at those companies who now, having
24 pursued the almost Biblical proportions of greed to feed on
25 money that which, no longer has value. Or insect mentality,

1 insect mentality is like, I need a job. What is a job get you?
2 I missed that one. But, my point -- men like me is like
3 kryptonite to Superman. You put me in a time block, fine, but
4 I'm down. Really falls off a branch.
5 Complex problems ladies and gentlemen requires slower
6 thought process at a greater body. And just as you're having
7 here tonight, it is an injustice. He should have reconvened
8 this meeting. He should have made a three day meeting, brought
9 cameras in so that men could rise and challenge other men and
10 probe, interrogate and then sit down. And rise again. You are
11 in a very special place ladies and gentlemen. You have a chance
12 in summary for a moment. You have a chance for your children to
13 lead the rest of the world. Within the next two to eight years,
14 you could make this transition. The oil companies would be
15 there with you. Quite frankly I think they're occupying their -
16 they're about to desert you. But the point is, it is my outrage
17 and sense of anger and disposition here is because you see a
18 great moment, instead of your children. Which are the ones we're
19 supposed to be about, to be a more free people. Instead of
20 bringing them to that new day and age, by having these
21 discussions that expand us all, we're having these Dodge City,
22 Kansas moments which are just simply influenced by bullying or
23 intimidation. And I'm sad by this.
24 Ten seconds. I thank you for the opportunity. And it is
25 a special place that I can sit with such a distinguished crowd

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1 in opposition and not hear weapons being cocked and loaded.
2 MR. LOMAN: Thank you.
3 MR. PRATT: I've served on Mayor Sullivan's Council. So,
4 I am speaking on behalf of myself and my family who moved here
5 30 years ago. Alaska is where we chose to raise our family.
6 We've had great adventures and hope to continue to do so.
7 Alaska economics needs to heal. Sale 193 should be
8 affirmed. This is critical to the nation. It would have
9 benefits to homes, families and business. It has an economical
10 value. Sale 193 has the potential to add domestic supplies, at
11 least equal to what has been produced on the North Slope. We
12 have a moral imperative to develop and use domestic energy
13 supplies.
14 Additional onshore and offshore oil development production
15 is necessary to extend the useful life of TAPS. An early
16 shutdown, due to either physical or economical constraints would
17 be devastating to Alaska and America. It was mentioned earlier
18 that OCS production in Alaska would provide about 35,000 new
19 jobs and \$72 billion worth of payroll over the next 50 years.
20 It would also generate thousands of new high paying jobs
21 throughout all 50 States in manufacturing, computer technology,
22 construction, maintenance, et cetera, et cetera.
23 Responsible development of Alaska's onshore and offshore
24 resources is critical to the advancement of Alaska's economic
25 engine. We are a young State. Population wise, we are a small

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1 engine. We are a young State. Population wise, we are a small
2 State. We know each other. With fewer than 700,000 residents
3 and barely 50 years of Statehood under our belt, we need all the
4 economic development we can muster to be a self sustaining,
5 envisioned by the Statehood Act. Unless we commercialize our
6 natural resources, we have little hope of surviving
7 economically.
8 Please allow us to continue to live in this thriving
9 healthy, pristine, magical place we call Alaska. This is the
10 right thing to do for America. This is the right thing to do
11 for Alaska families. Affirm Sale 193. Thank you.
12 MR. LOMAN: Thank you, sir. And, Kate Williams, next.
13 Sir, the floor is yours.
14 MR. MALONEY: Thank you. My name is Sam Maloney. My
15 father, Tom, is delivering my testimony this evening as I have
16 English and math classes Tuesday and Thursday evenings at UAA
17 that I cannot afford to miss. I agree with him.
18 A few months ago I had the opportunity to personally
19 testify on the OCS and importance to Alaska and the country's
20 situation with Secretary of the Interior Salazar.
21 This has been a big year for me. High school graduation
22 in May from South High School. I attended KCC in the morning
23 for their welding program. This great technical program led me
24 to major in welding and non-destructive testing at UAA. My goal
25 is to become a certified Welding Inspector in the next few

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1 years. By working very hard I already have four welding certs.
2 It cost a lot of money to attend a university and take
3 these kind of programs. The welding supplies, books, materials
4 are all very expensive. I and my fellow students need to pay
5 the piper and not expect anyone else to foot the bill. I worked
6 60 hours a week all summer to help pay my way.
7 A few years ago the Federal government accepted almost \$3
8 billion for lease sales from oil companies. So far, it appears
9 that not much is happening to create future employment
10 opportunities for Alaskans, like myself. Many of my fellow
11 students who are willing to work and obtain the necessary
12 education and technical skills are concerned that we will not
13 have an oil industry in Alaska a few years from now. Isn't
14 there a few trillion dollars worth of oil and gas reserves in
15 the OCS that the Federal Treasury may need to pay its debt?
16 When my Dad came here about 20 years ago, the Trans-Alaska
17 Pipeline had over two million barrels a day. Now we have less
18 than a third of that. Will the pipeline shut down when it's
19 only one third of what it is now? Will the oil industry, which
20 provides almost all of our State revenues, be forced to leave
21 Alaska to pursue opportunities overseas? Can I get a job
22 related to the oil industry, which is in rapid decline in
23 Alaska? Will I be able to pay my student loans and other debts?
24 Several of my friends' parents have relocated to places
25 like China, Australia, Canada and Germany to develop new oil and

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1 Alaskan expertise to other countries that are developing their
2 own resources. Why not develop our Alaskan resources to benefit
3 Alaskans and Americans?

4 We need to develop America's own resources especially
5 those here in Alaska. People like me need good paying jobs to
6 support families. The oil industry has been good for my family
7 and thousands of others. We need to keep it going. I do not
8 want to move out of Alaska or maybe the entire United States to
9 work as a Welding Inspector.

10 Let's get Alaska and America working again. It would be
11 nice to see some of my friends return to Alaska with their
12 families instead of communication through Facebook, Twitter,
13 MySpace and phone calls.

14 Thanks for listening and feel free to call or email. Sam
15 Maloney.

16 MR. LOMAN: Thank you.

17 MS. WILLIAMS: My name is Kate Williams and I am the
18 Regulatory Affairs Representative for the Alaska Oil and Gas
19 Association, AOGA. AOGA is a private, nonprofit trade
20 association whose member companies account for the majority of
21 oil and gas exploration, development, production,
22 transportation, refining and marketing activities in Alaska.

23 We appreciate this opportunity to provide comments on the
24 draft Supplemental Environmental Impact Statement, for the
25 Chukchi Sea Lease Sale 193.

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1 Chukchi Sea Lease Sale 193.

2 Lease Sale 193 should be affirmed as held in 2008 and in a
3 timeframe that does not further delay exploration and
4 development in the Chukchi. As stated by BOEM, the purpose of
5 the SEIS is to provide new analysis as directed by the U.S.
6 District Court for Alaska in a July 2010 Order. This Order
7 instructed BOEM to address only three concerns. The SEIS
8 addresses those concerns and recommends the sale be affirmed as
9 held. AOGA urges the Secretary to accept the conclusions of the
10 SEIS and expeditiously affirm Sale 193.

11 Lease Sale 193 is the most successful oil and gas lease
12 sale in Alaska's history, and at the time in U.S. history,
13 generating \$2.7 billion in high bids for 487 leases. The time
14 required to get from lease sale to first production is estimated
15 to be 20 years. Yet, to date, not even one exploratory well
16 associated with Sale 193 has been drilled.

17 Development of Alaska's Outer Continental Shelf is vital,
18 not only to Alaska's economy, but the nation's energy
19 independence. According to conservative Department of Interior
20 estimates, Alaska's OCS holds 27 billion barrels of oil and 132
21 trillion cubic feet of natural gas. By comparison, total
22 production from the North Slope has been approximately 16
23 billion barrels of oil. If access to Alaska's OCS resources is
24 allowed, Alaska would have the ninth largest oil resources in
25 the world, ahead of Nigeria, Libya, Russia and Norway.

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1 Access to these resources is critical to the continued
2 operation of the Trans-Alaska Pipeline system, which is
3 currently operating at about one-third of its capacity and could
4 be uneconomic to operate after 2020 without additional
5 throughput. Access is also a key component to the economic
6 feasibility of the proposed natural gas pipeline from the North
7 Slope to the Lower 48. OCS oil and gas development would also
8 benefit Alaska's economy by providing thousands of high paying
9 jobs over a long-term period.

10 To reiterate earlier testimony, a study by the University
11 of Alaska's Institute of Social and Economic Research and
12 Northern Economics found that new offshore energy production in
13 Alaska would create an annual average of 35,000 new jobs in the
14 State with a total payroll of approximately \$72 billion over the
15 50 year life of the project. New offshore development in Alaska
16 would also generate thousands of new high paying jobs throughout
17 the country across a variety of industries.

18 Alaska's North Slope and OCS are now perhaps the most
19 studied energy basins in the U.S. In the past decade alone over
20 250 studies have been funded in the Arctic with the majority
21 focused on the Beaufort and Chukchi Seas. All told over \$500
22 million have been spent on more than 5,000 independent studies
23 since 1973.

24 AOGA strongly urges the Secretary to affirm Chukchi Sea
25 Lease Sale 193 as recommended by the SEIS. The leases issued

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1 analysis. And the specific concerns the District Court raised
2 about the original lease sale in its July 2010 Order are
3 sufficiently addressed in the SEIS. Failure to affirm the sale
4 would allow a moratorium on exploration and development of
5 Alaska's OCS to continue, harming Alaska's economy and the
6 nation's energy security, without a corresponding benefit to the
7 environment. Thank you.

8 MR. LOMAN: You made it, thank you. It is now 8:30 p.m.
9 and at a couple of requests. The temperature in this room is no
10 longer fit. We'll take a five minute break. Go outside and
11 cool off and save your seats. Five minutes. Thank you.

12 (Off record at 8:30 p.m.)

13 (On record at 8:40 p.m.)

14 MR. LOMAN: All right we're going to get started. Mr.
15 Hendrix. Mr. Harbour is up next. Okay please be seated. In
16 five seconds -- four -- three -- two. Thank you.

17 MR. HENDRIX: Good evening, my name is Tom Hendrix. I'm
18 Vice President of Governmental Affairs for the Alliance. And
19 testifying on behalf of the Alaska Support Industry Alliance.
20 The Alliance is a nonprofit trade organization representing
21 almost 500 members -- organizations and more than 40,000 Alaskan
22 employees that provide goods and services to Alaska's oil and
23 gas and mining industries. Our livelihoods depend on a healthy
24 Alaska oil and as industry and investment climate. OCS
25 exploration and development is critical to our future.

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1 Unfortunately, as a result of a depressed business
2 activity in Alaska's oil patch, hundreds of Alaska oilfield
3 workers and professionals have lost their job. On behalf of the
4 Alliance and its members, I first want to thank the MMS and the
5 EIS that you've done, to date. And I have one simple request
6 tonight. Please submit your Supplemental Environmental Impact
7 Statement to the Court immediately.

8 Thirty-five thousand Alaska jobs are at stake. Alaskans
9 are ready to go to work. It's time for the Bureau of Ocean
10 Energy Management Regulation and Enforcement to do the same, and
11 fulfill their obligation to properly develop Alaska's Federal
12 resources and create business opportunities for Alaska's oil
13 field contractors and suppliers and their employees. Thank you.

14 MR. LOMAN: Thank you very much. Mr. Lakosh, two minutes.

15 MR. LAKOSH: Thank you for accommodating my disability. My
16 name is Tom Lakosh. I'm an Oil Spill Researcher. I've been
17 involved in assessing the legal and technical requirements of
18 affected oil spill prevention and mitigation.

19 I'd like to say -- start -- I admit that I'm not entirely
20 prepared to produce comments on the EIS. But it's apparent that
21 certain questions need to be addressed because of the concerns
22 of the citizenry. I'd like to remind all of those that are
23 interested in development that, because of scrutiny, there has
24 been half a billion dollars already invested in studying
25 environmental impacts.

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1 environmental impacts.

2 If the conservation community and support industries would
3 get together, I think you'd find that we could probably do this
4 job right and provide much more -- provide for the rights of
5 Alaskans to superior public uses of their resources.

6 By the way, oil spills are illegal so they could never be
7 a superior public use. But we could provide for more jobs and
8 more investments here in Alaska, if we do the job right. Right
9 now we find that the regulatory system does not properly account
10 for effective planning.

11 In the Gulf of Mexico, you'll see that BP planned for a
12 491,000 barrel per day spill. They said they had the capability
13 of recovering that amount of oil. They would cover an average
14 of 1,800 barrels per day. So the methodology called the
15 estimated daily recovery capacity was 273 times off of the mark,
16 and what it could realistically be recovered. The technology is
17 available to do it a lot better, if the industry put as much
18 time and effort into developing those technologies as they did
19 in extraction equipment.

20 They spend billion dollars on floating production and
21 offshore storage platforms. They could spend the money on the
22 technology and do it. Shell has contributed to the oil skimmer
23 X-Prize (ph) but they're not going to study for Arctic skimmers.
24 Their present skimmer systems are not -- cannot be used in
25 broken ice, because they are not designed to process ice. They

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1 of the oil area. They will not be able to concentrate the oil
2 to get to the skimmers that produce the recovery rates that they
3 profess.

4 They have not -- nobody has studied the effects of burning
5 oil. A recent symposium on that this spring showed pictures of
6 the soot coming right back down, due to temperature inversions,
7 spreading the oil soot all over the place where bears and fox
8 and seals will all roll around in it. They plan to leave the
9 oil in the winter, which is against the law. They're supposed
10 to recover it in a set period of time. They need to develop the
11 technology that can advance in broken ice. They need, to
12 Shell's credit, they need those ice breakers, the first that
13 have been brought up to the North Slope for recovery purposes.
14 And so they're sort of in the right way. They need to spend
15 more money. BOEMRE really needs to put some of that \$2.7
16 billion into an Arctic skimmer X-Prize (ph). Shell needs to
17 cough up a little bit more.

18 We could find the solutions, create more jobs and protect
19 the rights of the citizens to use the natural resources, if we
20 work together. Thank you.

21 MR. LOMAN: Thank you. June Childress.

22 MS. CHILDRESS: My name is June Childress. I live in
23 Wainwright, Alaska, and also the President of the Village
24 Corporation. And I live right smack dab in the middle of the
25 Chukchi Sea. So, this comes from our community as well as our

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1 Chukchi Sea. So, this comes from our community as well as our
2 Board of Directors of Olgoonik Corporation, our Tribal
3 organization and the City of Wainwright.

4 For generations we have followed a subsistence lifestyle.
5 While the waters of the Chukchi Sea provide many basic food
6 sources, it is important to consider the fact that we also must
7 rely on jobs to support subsistence. The cost to buy gas for
8 our boats, snow machines and 4-wheelers is high. In addition,
9 we must pay for the modern community conveniences we enjoy,
10 public water, electricity, telecommunications services. Without
11 the means of buying supplies, we cannot practice our way of life
12 as Inupiat people, let alone pass along cultural values to our
13 young people.

14 To meet this need for income, we are keenly aware of the
15 value of economic development in our community. For that
16 reason, the Village of Wainwright sees oil exploration in the
17 Chukchi Sea as one of the most important opportunities we have
18 for creating jobs. That is why we took the initiative in 2007
19 to make some preliminary investments in the local facilities,
20 equipment and training needed to support oil company operations
21 in the area.

22 Over the past four years, Olgoonik has invested in excess
23 of \$5.5 million in this effort. This business decision has made
24 it possible for Olgoonik to supply oil industry activities with
25 Marine Mammal Observers. a Communications Center that helps

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1 and supply support operation for companies conducting science
2 studies in the region and shore-based logistics and camp
3 facilities.
4 Let me emphasize that the Oigoonik Corporation is not
5 doing this alone. We are working as a team with the City of
6 Wainwright, the Tribal Council and the Whaling Captains. You
7 heard statements from these groups during testimony in
8 Wainwright on November 4th. It is also worth mentioning that
9 it's not only Wainwright that supplies properly managed oil
10 explorations in the Chukchi. Despite what a few social critics
11 say, and the media's focus on this minority, a great many
12 residents throughout the North Slope understand that a realistic
13 balance between subsistence lifestyle and exploration can be
14 maintained. Given the need to bring more jobs to these remote
15 villages, we urge the Federal government allow exploration to go
16 forward.
17 Thank you for your time.
18 MR. LOMAN: Dave Harbour.
19 MR. HARBOUR: I'll leave you with my written testimony,
20 which will be more succinct than the verbal. But I'll offer the
21 verbal in view of the time constraint.
22 MR. LOMAN: Thank you.
23 MR. HARBOUR: And maybe, after hearing the other witnesses
24 talk a little bit about things that maybe the panel has not
25 heard.

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1 heard.
2 The State of Alaska, when it was formed 51 years ago, was
3 formed really via a triumvirate of actions. One was a publicite
4 (ph) of the people of Alaska. Second, was the formation of the
5 Constitution of the State. And third, was enactment by Congress
6 of the Statehood Act. All three, to one degree or another,
7 recognized the fact that Alaska should not become a ward of the
8 Federal government ever again, that it should be able to sustain
9 itself based upon its significant array of natural resources.
10 Since Statehood, we've seen a gradual erosion of the
11 ability of this State to make a living based on its natural
12 resources. And were there more time and if anybody in the
13 audience who's shaking a head, wishes to explore that matter we
14 could explore it with specific examples at great length.
15 At this point, let's look at current actions leading up to
16 the present. First of all, Judge Beistline, in effect blessed
17 the good work of the MMS, BOEM with the exceptions of some
18 remedies that he sought and remanded the work to the BOEM.
19 Thanks to conversations that you shared with me before the
20 meeting, I learned that you did not have to construct an SEIS
21 which is part of NEPA required public hearings like we're having
22 around the State now. Rather, you could have submitted the
23 remedies more directly to the Court as the Court ordered. But
24 out of abundance of caution, you didn't. You went through this
25 process. I respect that.

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1 At this point, as a former regulator in the State of
2 Alaska, my advice would be, that because of the delays that have
3 been incurred over a long period of time, at a cost to the
4 lessees of several billion dollars, about a billion more than
5 was originally bid. We're at the point, I believe, where Alaska
6 is on the cusp of losing OCS development. If we lose OCS
7 development due to further delay, and that delay could be a BOEM
8 decision and a Secretary Salazar decision not to provide the
9 approvals necessary by the end of this year -- if that doesn't
10 happen, we could see the ability of the industry to mobilize for
11 the next summer season lost.
12 If that happens, we may see a loss of OCS altogether.
13 That could result in an inability of the State to sustain the
14 Trans-Alaska Pipeline. A previous witness estimated that it
15 could be in 20 years that that pipeline could be -- to fall into
16 disuse. But if at three-quarters empty, at this point, between
17 500,000 and 600,000 barrels a day declining, at a rate of about
18 six percent per year -- you do the math. In a cold winter day,
19 out of an abundance of caution, the owners of the pipeline may
20 well decide to surplus that pipeline well before that time,
21 perhaps as soon as seven years from now.
22 Since 90 percent of the State operating budget is based on
23 that, and since one-third of the entire State economy is based
24 on the throughput of that pipeline, the Chukchi Sea with a
25 potential of over twice the productivity of Prudhoe Bay, and

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1 on the Slope, could provide the ability of the State of Alaska
2 not to again become a ward of the Federal government.
3 In addition, the provision of Federal income taxes and
4 royalties as well as the ability of the State and the local
5 governments to achieve property taxes and sustain the dwindling
6 throughput of the Trans-Alaska Pipeline, could enable the State
7 to continue to function. Thank you for the opportunity.
8 MR. LOMAN: Thank you. Mr. Thompson. Rachael Daniel.
9 That was donated by a member of our audience, to help. And Kirk
10 Jackson after Rachael. Kirk -- Rachael, the floor is yours.
11 MS. DANIEL: My name is Rachael Daniel and I was born and
12 raised in Alaska in a family dependent on a subsistence
13 lifestyle. And, tonight I'm speaking on behalf of the PUGH (ph)
14 Environment Group and we will be submitting comments, written
15 comments. So as we have limited time, I will only have enough
16 time to focus on one point tonight. Unfortunately, I can't
17 cover all the points I'd like to make. And so I'm going to
18 focus on one that's important to me and, that's science.
19 As a scientist, I would like to say that while there has
20 been a great -- well there has been and there continues to be
21 really good research conducted in the Chukchi Sea. There
22 remains a great deal of unknowns such as those acknowledged by
23 BOEMRE in the original Lease Sale 193, both on the lack of
24 information about species and habitats, as well as on the
25 effects of oil and gas activity on species and habitats.

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1 effects of oil and gas activity on species and habitats.
2 The U.S. Geological Survey office in DOI is currently
3 conducting an initial review on science gaps related to Outer
4 Continental Shelf oil and gas Development in the Arctic,
5 Beaufort and Chukchi Seas. This review, under the direction of
6 Secretary, was to identify gaps in knowledge about the Arctic
7 Ocean with the results are to be viewed -- to be public in April
8 of 2011. And this information obtained in the USGS review would
9 likely have provided relevant information of data gaps, and the
10 means by which to address those gaps as related to OCS oil and
11 gas activity.

12 Furthermore, Secretarial Order Number 3305 on Scientific
13 Integrity signed by Secretary Salazar on September 29, 2010,
14 provides policy and direction that any decision from DOI will be
15 based on the best available science.

16 We do not believe that the review of the gaps in the
17 Chukchi Sea EIS was consistent with that policy. And we believe
18 that the BOEMRE should coordinate its lease 193 remand analysis
19 with the ongoing USGS analysis.

20 And related to science, one other point that I'd like to
21 make is that missing information could also be incorporated with
22 the use of traditional knowledge. And this traditional
23 knowledge should accompany research to aid western scientific
24 understanding of the Arctic marine environment. In the
25 documentation of existing knowledge and gathering of new

1 throughout the research and management continue to help analyze.
2 Interpret and apply that knowledge appropriately, in conjunction
3 with western scientific findings and other relevant information.
4 Thank you.

5 MR. LOMAN: Thank you Rachael.

6 MR. JACKSON: My name is Kirk Jackson. I'm a Business
7 Agent for Local 375, the Plumbers and Pipefitters of Fairbanks,
8 Alaska. I'm also an instructor at the Pipeline Training
9 Facility in Fairbanks. I'll be extremely brief. A lot of the
10 points I was going to talk about have been hit multiple times
11 this evening from the strongest support the Sale of the Lease
12 193 in the Chukchi and, similarly, the Beaufort.

13 The decline of Prudhoe Bay and, of course, TAPS at one
14 third and the continued decline of that over the next eight to
15 ten years, the development of the Chukchi is vital to Alaskans
16 and Alaskans' families and the economy of Alaska. Thanks for
17 your time, appreciate it.

18 MR. LOMAN: Rick Braun, then Kimberly Howard.

19 MR. BRAUN: I'll try to be short. I'm one of the few
20 people probably here that doesn't have some sort of financial
21 interest in all of this. I'm just a guy who lives here and
22 wants to keep living here. And want my kids to keep living
23 here. That requires a functioning economy. And I can see with
24 the rope-a-dope that's been going on with this lease sale, the
25 endless delays, the endless studies -- pretty soon you're going

1 endless delays, the endless studies -- pretty soon you're going
2 to have to have charts that go over the horizon to list the
3 studies I think -- or else go to a smaller font, I don't know.

4 That will never be enough. They'll want more. They'll
5 want another study of this, another delay for that. This is a
6 resource State as Mr. Harbour pointed out. We became a State
7 because we have resources sufficient to supposedly allow us to
8 be a functioning State. We're being strangled with our
9 resources, to the point where maybe we won't function anymore
10 and we'll be a welfare society State. And I don't know if the
11 government's got enough money left to make us a welfare society
12 State.

13 Instead of going with the Chicken Little scenarios of
14 worrying about what about this and what about that, and let's
15 study it some more. And that study is two days old so we got to
16 do another one because that one is out of date. Let's just get
17 on with it. Let's approve the EIS, the Supplemental EIS, the
18 whatever EIS you come up with. And let's go do something.
19 Because that's the best way to learn what you need to do, how to
20 do it, just like in the Gulf. In the McCondo (ph) well,
21 everybody had ideas, plans, you name it, theories. Well,
22 something went wrong. It didn't all work. And they've learned
23 a heck of a lot, I'm sure. That's a 5,000 foot and below well.
24 We're talking 150 feet. I think the pressure differential is
25 just a little bit different. And maybe we won't have a McCondo

1 (ph).

2 It's amazing to see in your study that you're trying to
3 calculate CO2 and CH3 releases when, isn't the idea of drilling
4 a well -- to pull something out and burn it? And you're going
5 to worry about how much CO2 and CH3 is -- might be released
6 while you're drilling for it? That's a waste of time. The lady
7 from Wainwright, I'm sure and other villages, would love some
8 natural gas just like this city is starving for natural gas.
9 Because even though -- I don't know what the barrels per
10 equivalent is of 75 bodies in here, but this is pretty warm.
11 But if you shut the gas off, it's not going to be that warm. I
12 lived in North Pole for 20 years. Man, when it gets 40 below,
13 man I love my heating oil. You just can't make it without it.
14 So let's get on with it.

15 You keep calling for basing it on sound science. That's
16 just a rope-a-dope trick of, we need one more study. We need
17 one more study. We need one more, one more -- we'll never get
18 to the actual thing.

19 Mr. Danson left, and his recycling motor oil thing, well
20 we do that over here at the Transfer facility. I don't think
21 that'll heat this building, let alone the City of Anchorage.
22 Ideas like that might be nice, feel good but that isn't it. We
23 need to drill some holes, get some oil, get some gas so we can
24 keep on living like we are. Thank you.

25 MR. LOMAN: Thank you sir. Kimberly Howard. Mindy

1 Mr. Portman, Mr. Portman.

2 MR. STOLTZ: Bill Stoltz. Just got another two year
3 contract renewal, the fifth one in the Legislature. But I'm
4 speaking for myself. The Legislature has also affirmed support
5 for this and other developments. Wish I could have been here a
6 week ago. Everybody was pro-development a week ago, at least
7 the folks who were running against it.

8 I support forwarding the Lease 192 (sic), that's EIS. I
9 look at one of my grade school friends I wasn't expecting to see
10 here. I know his -- he doesn't want his legacy project on
11 another study. He's going to -- Colville River to be his legacy
12 project. He'd like to be building some things and pointing to
13 dams and other projects, not saying well this is my 15 years, I
14 got an EIS through. But I'll leave it at that, and I'll supply
15 written testimony later.

16 MR. LOMAN: Thank you sir. Mr. Portman then Rebecca.

17 MR. PORTMAN: Good evening. My name is Carl Portman. I'm
18 the Deputy Director of the Resource Development Council here in
19 Anchorage. RDC urges the Bureau of Ocean Energy Management to
20 confirm Lease Sale 193. We believe the SEIS provides sufficient
21 information and analysis to support a decision affirming this
22 sale.

23 OCS oil and gas production is absolutely critical to
24 Alaska's future economy. With the Trans-Alaska Pipeline now
25 running at one-third capacity. exploration blocked in ANWR, and

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1 running at one-third capacity. exploration blocked in ANWR, and
2 non-development activists working toward wilderness designations
3 in the National Petroleum Reserve, nothing less than Alaska's
4 future economy is at stake. The responsible development of
5 potentially immense oil and gas deposits in the Chukchi Sea
6 would significantly boost the economy and extend the life of our
7 oil pipeline. Without new Federal oil production, TAPS could be
8 uneconomic to operate sometime in the next decade as we have
9 heard here this evening.

10 Between ANWR, the Alaska OCS, and NPRA there could be
11 nearly 40 billion barrels of oil in place. The sustainability
12 of TAPS in our economy will largely depend on some combination
13 of oil production from these Federal areas. Yet there are
14 forces working hard to prevent development in these areas which
15 represent the nation's best onshore and offshore oil and gas
16 prospects. If there is no oil and gas development in ANWR or in
17 the Chukchi Sea, and the best prospects in NPRA are ultimately
18 taken off the table, the Federal government must then accept the
19 consequences, including heavier reliance on foreign oil, soaring
20 trade deficits, a weaker and more vulnerable national economy
21 and compromised national and energy security. For Alaska, our
22 future will be bleak with the State losing 90 percent of its
23 revenue base.

24 Not developing Federal oil in Alaska makes no sense from
25 an economic and energy security standpoint, especially given the

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1 great cost. OCS development in Alaska would generate hundreds
2 of billions of dollars in royalty and tax revenues and aid the
3 nation's economic recovery by reducing the trade deficit and
4 creating tens of thousands of new jobs.

5 In addition, OCS gas discoveries would significantly
6 improve the long-term economic viability of the proposed gas
7 pipeline from the North Slope to the Lower 48, a clean energy
8 priority of the Obama Administration.

9 In concluding, RDC has a high level of confidence that
10 exploration development can occur safely in the Arctic. Alaska
11 does have a bright future and has much to contribute to the
12 nation with this abundant natural resources. All that is
13 required are policies and key decisions from Washington
14 encouraging development of these resources. Thank you.

15 MR. LOMAN: Thank you Mr. Portman. Rebecca and then
16 Colleen.

17 MS. NOBLIN: Hi, my name is Rebecca Noblin, and I'm the
18 Alaska Director of the Center for Biological Diversity. And I'm
19 also an Alaska resident and a big fan of the Arctic. As you
20 know the Arctic is in trouble. It's warming at twice the rate
21 of the rest of the world. And Arctic summer sea ice is
22 disappearing more rapidly than any of the climate models
23 predicted. Chukchi species including, polar bears and Pacific
24 walrus are already showing signs of stress from this
25 unprecedented loss of their sea ice habitat. This fall Pacific

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1 unprecedented loss of their sea ice habitat. This fall Pacific
2 walrus are already showing signs of stress from this
3 unprecedented loss of their sea ice habitat. This fall Pacific
4 walrus congregated on the shore near Pt. Lay in the tens of
5 thousands, an absolutely unheard of number, because there was no
6 suitable sea ice for them. The climate change isn't the only
7 thing threatening these Arctic animals with extinction. They're
8 also threatened with increasing industrial oil and gas drilling
9 in the Chukchi and Beaufort Seas.

10 The Agency formerly, known as MMS, and still acting like
11 MMS, has determined that despite huge gaps in information about
12 bowhead whales, polar bears, walrus, and pretty much all living
13 things in the Arctic, it was not a mistake to sell the Chukchi
14 Sea off to the highest bidders in 2008.

15 MMS, I'm here to urge you -- or I'm here to tell you
16 something that you should already know. You cannot
17 realistically claim that drilling in the Arctic is safe. People
18 from Alaska Native communities have been telling you that for
19 years. Scientists have been telling you that for years. Courts
20 have been telling you that for years. But I'll say it one more
21 time. Drilling in the Arctic is too risky.

22 No one has the technology to clean up oil in broken ice
23 conditions. There is no way to mobilize even a fraction of the
24 response required for the Gulf disaster in the remote Arctic.
25 And the truth is, that a large oil spill could mean the

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1 species.

2 Unfortunately, your draft Supplemental Environmental
3 Impact Statement doesn't come anywhere near addressing these
4 problems of critical importance. Your draft EIS doesn't satisfy
5 your obligation to protect America's Arctic and it does not
6 comply with the law. In order to comply with the law, you must
7 analyze the substantial gaps in scientific information in the
8 current EIS, and make a good faith effort at obtaining that
9 information that's realistically attainable. And most
10 importantly, you must not allow drilling to go forward unless
11 you have the scientific knowledge to say, truthfully, that
12 drilling in the Arctic is safe.

13 MR. LOMAN: Thank you, Rebecca. Colleen Keane and then
14 Barbara Huff.

15 MS. KEANE: My name is Colleen Keane, and I'm the Alaska
16 Program Associate with Pacific Environment. Thank you for the
17 opportunity to provide comments tonight. I would like to urge
18 the Alaska Region of the Bureau of Ocean Energy Management
19 Regulation and Enforcement to issue a new draft SEIS after it
20 has reviewed relevant reports from the U.S. Geological Survey
21 covering Arctic Ocean science, and from the National Commission
22 on the BP Deepwater Horizon oil spill and offshore drilling
23 covering BOEMRE shortcomings.

24 This new draft Supplemental Environmental Impact Statement
25 needs to include information from these upcoming reports and

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1 needs to include information from these upcoming reports and
2 reassess which scientific information in Appendix A of the
3 current draft SEIS is obtainable at a cost that is not
4 exorbitant, rather than dismissing the need to gather such
5 information as was done in the current draft SEIS.

6 By dismissing the need to gather such information, the
7 Bureau under President Obama, after the Deepwater Horizon spill
8 is saying the same thing as the former MMS. That is, that no
9 matter what the impacts will be, it would allow drilling to
10 proceed. As example, the draft SEIS says that if a large oil
11 spill occurs, significant impacts could follow. And it is well
12 understood that the environmental impacts associated with a
13 large oil spill could be quite severe. Yet the Agency still
14 chooses to proceed with drilling.

15 The hastily issued draft SEIS runs counter to the law and
16 to the Department of Interior's recent commitments to the
17 American public to ensure scientific integrity and to improve
18 the Agency's leasing decisions and regulatory oversight.

19 The consequences of rushing through offshore oil and gas
20 drilling approvals, without understanding and disclosing to the
21 public the potential impacts, were tragically displayed in the
22 Gulf of Mexico. The Bureau should not allow the Arctic Ocean,
23 its wildlife or its people to experience a similar disaster.
24 Responsible development means not proceeding faster than can be
25 justified. Thank you again for the opportunity to comment.

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1 MS. HUFF TUCKNESS: Thank you for the opportunity to
2 testify this evening. I am not going to bore you with a lot of
3 written testimony. We are going to submit more detailed
4 information directly to the Bureau. For the record, my name is
5 Barbara Huff Tuckness. I'm the Director of Governmental and
6 Legislative Affairs for Teamsters, Local 959. And I'm here
7 tonight to speak on behalf of Ken Coleman who, unfortunately, is
8 out of town.

9 We represent approximately 6,000 employees, members of our
10 institution, of which we've had hundreds that have worked on the
11 Slope. Just for the record, we also represent workers in the
12 mining industry. We also represent workers in the film
13 industry. So, we have a pretty broad gambit of members that we
14 represent across the State. And, fortunately, we believe that
15 the industry does have opportunities out there. We also believe
16 that the industry can do so in a safe and responsible manner.

17 We've talked about the Gulf of Mexico. There's also been
18 discussion about the Exxon oil spill. Those are all unfortunate
19 situations that did occur. I do believe that a lot of us have
20 learned from those particular experiences. And that, just
21 looking at the studies that have been done, and we do believe
22 that the Bureau has been tasked to continue to make sure that
23 the environment is protected, as the industry moves forward with
24 the particular job opportunities as well as -- not only on
25 offshore but onshore, as well.

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1 offshore but onshore, as well.

2 And with that I appreciate the work and the effort that
3 you've done. And hopefully you move forward with this. Thank
4 you.

5 MR. LOMAN: Vince and then Bob Scheidemann.

6 MR. BELTRAMI: Thank you and thank you for the opportunity
7 to testify. My name's Vince Beltrami. I'm President of the
8 Alaska AFL-CIO, representing about 60,000 working families in
9 the State of Alaska. And I've also heard from a lot of my
10 affiliates in the building trades from Fairbanks who didn't have
11 an opportunity to testify, in person, so I carry their message
12 as well.

13 And with all due respects to my friends in the
14 environmental movement who are in opposition to these leases, I
15 strongly encourage you to affirm the decision made on Lease Sale
16 193 in 2008. And there's nothing in the SEIS that I've seen
17 that should derail this process.

18 If these leases are rescinded, I think one of the greatest
19 opportunities in our nation to create jobs, contribute to the
20 reduction of our massive Federal deficit, and wean ourselves as
21 a nation away from the grip that foreign oil has on our country,
22 will be lost. To be able to produce roughly 29 billion barrels,
23 another possible 200 trillion cubic feet of natural gas, the
24 Chukchi may well hold the key to helping us solve a significant
25 part of our country's energy woes. To rescind these leases

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1 would be to remove the potential of 35,000 year-round jobs and a
2 payroll of more than \$70 billion.

3 Obviously, concerns about the safety of the environment
4 are paramount. And Shell should and, I'm sure, will be held to
5 the highest safety accountability standards possible. And as
6 everyone knows, we can ill afford a Gulf Coast style catastrophe
7 in our Arctic waters. But this company's got an excellent track
8 record in Alaska. They've got a robust safety plan. They've
9 been safely drilling in Alaska for 50 years. And as long as the
10 company can meet all environmental and regulatory benchmarks,
11 they should be allowed to proceed towards development.

12 As it's been said, dozens of wells have been drilled in
13 the Beaufort and Chukchi, all without incident and all with
14 older technologies. I'm confident and appreciative in knowing
15 that the Obama Administration trusts and values the concerns
16 expressed by the hard-working men and women of the Alaska labor
17 movement. The ability to safely explore and produce oil in
18 Alaska is among the highest priority of Alaska's building and
19 construction trades unions.

20 And thank you again for the opportunity.

21 MR. LOMAN: Thank you sir. Bob Scheidemann and then
22 Robert Foster.

23 MR. SCHEIDEMANN: I'm Bob Scheidemann. I'm a scientist.
24 A lot of the points supporting exploration, I agree with. And
25 I'd like to concur with those people and recommend that we

1 been drilled in the Alaska OCS since 1980, all without
2 significant incident or any incident, whatsoever. And I think
3 it's prudent to move forward at this time and ask for the SEIS
4 to let them move forward.

5 MR. LOMAN: Thank you sir. Mr. Foster.

6 MR. FOSTER: My name is Robert Foster. I work for Shell
7 Oil Company. I'm a Geophysicist. I think most of my points
8 have already been covered. I just want to say that I urge the
9 Department to affirm its previous lease sale decision and allow
10 exploration Sale 193 to proceed.

11 MR. LOMAN: Thank you sir. John Shepherd and then Mr.
12 Grafe.

13 MR. SHEPHERD: Well, I'm John Shepherd. I'm a scientist
14 and taxpayer. And my main points in support of Sale 193
15 exploration have already been made by others. So to allow more
16 time for others, all I need to say is that the Environmental
17 Impact Statement and the Supplemental Environmental Impact
18 Statement do provide sound scientific basis to allow exploration
19 to begin in the Chukchi. And so I urge the Department of the
20 Interior to affirm its previous lease sale decision and let's
21 get started with exploration. Thank you.

22 MR. LOMAN: Thank you, sir. Mr. Grafe. And then it looks
23 like after Mr. Grafe, Craig Johnson.

24 MR. GRAFE: My name is Erik Grafe and I am here on behalf
25 of Earthjustice. It's an environmental law firm. And broadly,

1 it's our position that offshore oil and gas leasing and drilling
2 in the Arctic Ocean should not occur until we have a basic
3 scientific understanding of the region, and duly obtain adequate
4 spill clean-up capability. Neither exists now. And the
5 Deepwater Horizon tragedy shows us that offshore oil and gas
6 drilling is terribly risky business. We need to understand and
7 fully disclose those risks before making decisions to commit the
8 Arctic's people and its wildlife to those risks.

9 Specifically, we believe that BOEMRE's Alaska Region has
10 failed to meet the obligations of NEPA and the District Court's
11 Order in its draft Supplemental EIS here. In the original EIS
12 and in the Supplemental EIS, the Agency admits that much
13 information -- here it's over 100 pages of admissions of missing
14 information is not known. And that a lot this information is
15 relevant to significant effects from oil and gas activity.

16 Yet, amazingly, in this document BOEMRE concludes that
17 none -- not a single piece of that missing information is
18 essential to a decision about whether -- where, how, if,
19 (indiscernible) in the Chukchi Sea. To take one example, the
20 original EIS and the draft Supplement says, we don't know enough
21 about marine mammals. And that's a lot of things in the Chukchi
22 Sea. We don't know enough so, at this time, we're not able to
23 determine whether or not there would be significant effects from
24 oil and gas activity on marine mammals.

25 Yet, the Agency concludes this isn't essential to our

1 choice about where or whether to allow this to happen. This is
2 just -- it's simply not credible. The BOEMRE, you owe an
3 obligation to the American public so people, to everybody, to do
4 your job and figure out what is the information that's missing.
5 That it's essential to the lease sale choice and not just paper
6 over with -- not just paper the problem over, but do an honest
7 effort, a big and honest effort to identify what's missing.

8 There are other parts of the government that are doing
9 this now. The USGS is conducting a survey about what are the
10 important missing information. NOAA says there's important
11 missing information. They closed the fisheries up there because
12 they need to get more information before you make management
13 decisions. This is simply the first step. And doing proper
14 management and ensuring that we know it's there. So we know how
15 to manage oil and gas in the region and whether it can go
16 forward and whether it's a good idea to do so.

17 So we urge BOEMRE not to finalize this draft Supplemental
18 EIS, but rather to go back, take another look and do an honest -
19 - take an honest crack at identifying the missing information.
20 And finding out, which of it can be gotten, not at an exorbitant
21 expense rather than concluding that, simply none of it, not any
22 of the hundreds of missing pieces of information is essential to
23 the lease sale choice.

24 Thank you very much for this opportunity to testify.

25 MR. LOMAN: Thank you.

1 MR. JOHNSON: My name is Craig Johnson. I'm the sitting
2 Chair of Natural Resources Co-Chair in the House of
3 Representatives. I'm here today to, hopefully, bring this
4 conversation back to why we're here. We've heard about polar
5 bears. We've heard about shrinking ice. We've heard about, yes
6 we should, no we shouldn't.

7 What we're here today for, is to decide whether or not --
8 and your charge is to decide whether or not to return something
9 that a Judge has asked you for. That's the bottom line. If
10 you've done your job, and I believe you have. I've looked
11 through the document. Then I encourage you tonight, put a stamp
12 on it. Send it to the Judge. And then he'll be the person that
13 determines whether or not you did a good job. That's where it's
14 going to end up. It's not going to end up in this group. It's
15 not going to end up with you. It's going to end up in the hands
16 of the Judge who's going to say, yes you did, or no you didn't.
17 If you did, we're done. If you didn't, we'll be back here in
18 three weeks doing this all over again.

19 We just had a President go to India. And he's saying,
20 35,000 jobs, boy, look what we did. We could provide 35,000
21 jobs here starting quickly. And we don't even want a seat on
22 the Security Council. We don't even want to be in the U.N. We
23 just want our jobs. We want our resources. You've done your
24 job. Finish it up. Put a stamp on it. Do it tonight.

25 MR. LOMAN: Thank you very much. Mr. Pastos, Nikos

1 Patstos, Center for Water Advocacy. Jeff Jones. Jeff Jones?
2 MR. JONES: Thank you. For the record, my name is Jeff
3 Jones. I want to thank the Bureau for the opportunity to speak
4 tonight.

5 I think it's clear to a lot of people who live here. I've
6 lived here for ten years -- that the topic under discussion
7 tonight is vital to the future economy of the State of Alaska.
8 Our economy has been and will continue to be, in large part,
9 tied to the Trans-Alaska Pipeline. And OCS plays an integral
10 role in, hopefully, putting some additional oil, potentially a
11 large amount of oil, into that pipeline and keeping it going,
12 and keeping people working in this State.

13 But I think that it goes much beyond our borders and
14 affects what is taking place in the rest of our country and in
15 North America. The energy needs in North America and all over
16 the world are going to continue to increase drastically in the
17 next decades. Alaska can play a vital role in helping to
18 provide the energy that is needed, not only in our country, but
19 throughout the world. There are a lot of positives. It creates
20 jobs. Development of OCS creates wealth. It helps to offset
21 our huge negative imbalance with our trades overseas. And it
22 also keeps us from sending a lot of money overseas to countries
23 like Venezuela and Iran. So I would just like to strongly
24 affirm the moving forward with the Lease Sale of 193.

25 MR. LOMAN: Thank you sir. Nikos, one last time. Carl

1 Wassilie? Andrew Hartsig, Andrew? Nikos?

2 MR. WASSILIE: No, Carl Wassilie.

3 MR. LOMAN: Carl. Going down a long list. Carl, it's all
4 yours.

5 MR. WASSILIE: Hello, my name is Carl Wassilie, born and
6 raised in Alaska. Come from a strong subsistence family, as
7 well as a family that's been involved in safety, pipeline
8 safety, as well as safety of workers. And I'm really concerned
9 about the -- about drilling in the Arctic Ocean, not only
10 because of the lack of infrastructure, but the current Bureau of
11 Ocean Energy Management. I'm sorry, you used to be called the
12 Minerals Management Service, so I keep pausing on that. So the
13 Bureau of Ocean Energy Management and Regulation and Enforcement
14 is still learning from the Gulf of Mexico, Deepwater Horizon
15 catastrophe.

16 There's definitely shown that technology and engineering
17 for drilling is rapidly outpacing the technology for safety of
18 spill prevention. And so the risks are not adequate for the
19 pace of development, particularly in the Chukchi Sea and the
20 Arctic. Under the current conditions, weather patterns -- and
21 so, that's just something that needs to be addressed, as more
22 information develops from the hearings that are currently
23 happening in D.C., with the Presidential Commission.

24 The Arctic is one of the most complex and dynamic
25 ecosystems on the earth, at this point in time. It is rapidly

1 changing but there's still hadn't been a whole lot of
2 information regarding species. And there's a -- the diversity
3 of interlocking oceans connected up to the Arctic around the
4 planet. So, there's still questionable process of allowing the
5 193 Sale to continue without the baseline studies on --
6 particularly with the scientific information of indigenous
7 science when including traditional ecological knowledge.

8 A lot of the basis of long term knowledge of changes, as
9 well as species, resides with the indigenous observers that have
10 been here for thousands of years. And incorporating this
11 knowledge into various systems that are in the culture, that are
12 in the indigenous societies that live in the environment that
13 are being discussed here today in the Chukchi Sea.

14 So the message is clear from the communities that live
15 there and subsist off the wildlife and the marine mammals, that
16 they want to protect that. And so, got to make sure that all
17 the information is there, including that we bring up to speed
18 the technology of safety for the environment, for the benefit of
19 all the people. But this is -- so I'm opposed to the offshore
20 drilling, at this point in time, until there is adequate science
21 on oil spill cleanup and technology that catches up to the
22 drilling technology, as noticed in the Gulf of Mexico. Thank
23 you very much.

24 MR. LOMAN: Thank you sir. Keith Silver, then Susan Childs

25 MR. PASTOS: Sir, my name is Nikos Pastos.

1 MR. LOMAN: Yeah, I called your name. Keith Silver is
2 next.
3 UNIDENTIFIED MALE: What about Andrew Hartsig would he be
4 next?
5 MR. LOMAN: Okay I didn't know you were here. Okay,
6 sorry. Andrew, Keith, Susan Childs, then you sir.
7 UNIDENTIFIED MALE: All right thank you.
8 MR. HARTSIG: My name is Andrew Hartsig. And I'm a
9 Director of Ocean Conservancy's Arctic Program. In preparing
10 the draft SEIS the Alaska Region should have reviewed the
11 information gaps in the original EIS and taken a fresh look at
12 the decision to hold a lease sale. Instead, the draft SEIS
13 ignores important information gaps in an improper attempt to
14 justify a previously made decision. So, despite all these
15 charts on the wall and all these studies, the original EIS
16 identified hundreds of instances of missing information.
17 The draft SEIS concluded that not a single piece of that -
18 - those missing information was essential to the Agency's
19 decision. That conclusion is not plausible. It's not supported
20 by the record. And it's inconsistent with the Obama
21 Administration's commitment to science-based decision making.
22 So the Agency needs to go back to the drawing board and it
23 should satisfy this flawed draft SEIS, undertake a more serious
24 attempt to identify essential missing information.
25 And to do that, the new analysis should be based in part

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1 on the data generated by the ongoing USGS analysis. Once that
2 missing information is identified, the Agency should obtain that
3 information, ideally through a comprehensive scientific research
4 and monitoring program. And then, finally, the Agency should
5 prepare a revised draft SEIS and re-evaluate the lease sale in
6 light of the new information. Thanks.
7 MR. LOMAN: Thank you, sir.
8 MR. SILVER: Good evening. My name is Keith Silver and
9 I'm a resident of Anchorage. We must move forward with Lease
10 Sale 193 -- opportunities for employment for those in the area
11 as well as other parts of Alaska. Although I realize that the
12 U.S. District Court sent this back to you, it is vitally
13 important that the EIS be approved. I'm an unemployed oilfield
14 service worker. I worked in -- previously, just recently worked
15 in Anchorage. It's a lack of activity in the oilfield,
16 including that of the Chukchi Sea and the Beaufort Sea, caused
17 my firm to downsize. I am one of thousands idle. How do I pay
18 for my mortgage or feed my family is the question being asked by
19 many of those displaced persons.
20 The Trans-Alaska Pipeline is only one-third full and needs
21 additional sources of oil to keep it operating. This is the
22 sixth or seventh time I have testified on OCS leasing issues. I
23 will continue to advocate for environmentally responsible oil
24 development, as long as necessary. Thank you for your time.
25 MR. LOMAN: Thank you. Susan Childs and then Michael

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1 Droege.
2 MS. CHILDS: Good evening. So my name is Susan Childs and
3 I'm the Alaska Venture Support Integrator for Shell here in
4 Alaska. So there have been lots of comments made that I hope I
5 don't repeat. But, the one thing I would ask is that the Agency
6 continue with the process that you're on. It's a legal NEPA
7 process to go through the draft, to collect these comments, to
8 take the comments from the North Slope and from Kotzebue, to
9 incorporate those comments into your final report and then on to
10 a record of decision. So that's the process that you go through
11 in NEPA. And so I support that process and I just encourage you
12 to expedite that process.
13 So, if you'll indulge me, I'd like to go back to February
14 of 2008. It was when the Chukchi Sea Lease Sale 193 signaled
15 for all in attendance that the offshore was clearly the next
16 chapter in this State's oil and gas history. There were audible
17 gasps that day when the bids were opened, and with good reason
18 because there was \$2.7 billion committed in bonus bids. The
19 leases in the Chukchi Sea, which made it the largest lease sale
20 in Alaska's history.
21 Shell's \$2.1 billion in successful bids also solidified
22 our standing as the major leaseholder in the Alaska offshore,
23 including in the Beaufort Sea where Shell first started
24 purchasing leases again in 2005. So, since we have re-entered
25 Alaska, we have spent over \$3.5 billion in pursuit of Arctic

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1 exploration. And we will commit to many billions more if we are
2 able to go forward to a development program. I would like to
3 repeat that sentence to you. This company has spent over \$3.5
4 billion in pursuit of an exploration program. Not a development
5 program, but to drill a well. So for those opposed to OCS
6 development, this comment period is another bite at the apple,
7 and to take your course.
8 But I will tell you there many that understand the issues
9 and they are stark and here they are. America depends on oil to
10 drive our economy. We will import all oil we do not produce in
11 this country. America continues to expand its percentage of
12 imported oil today. Alaska depends upon energy development for
13 vast portions of our economy. TAPS through-put continues to
14 diminish and currently flows at a third of capacity. Alaska's
15 OCS could be, and we believe it will be, the new heartland for
16 energy and for Alaska and for this country.
17 We are ready to go. We have been ready to pursue a
18 drilling program since 2007. And yet we wait. We wait upon an
19 Administration to establish an Arctic policy to allow the
20 permitting process to proceed. We wait upon courts to review an
21 incessant number of litigation. We wait for Agencies to review
22 and assess more rounds of comments and submissions. And we know
23 what's at stake. We've been to over 450 stakeholder engagement
24 processes over the last four years on the North Slope. So we
25 have engaged with the community. Ae have engaged a great deal

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1 with the people on the North Slope.
2 We just signed a North Slope Borough Science Agreement
3 with the mayor and his staff. So that was a long awaited
4 collaborative effort. And we look very much forward to making
5 sure that we do that, and that we get more studies done.
6 Because, I will tell you, the North Slope and the Arctic
7 offshore are now perhaps the most studied energy basins in this
8 country. In the past decade, over 250 studies have been funded
9 in the Arctic with the majority focused on the Beaufort and the
10 Chukchi Seas. You can argue with that, but those are the stats.
11 Since 1973, more stats -- the Federal agencies and
12 industry have performed more than 5,000 environmental
13 assessments, studies to better understand the Alaska Outer
14 Continental Shelf and coastal environment, because that's very
15 important to understand the coastal environment, as well.
16 So we've been ready to explore Alaska's OCS. And I do
17 thank you for this opportunity to express our wishes for this
18 NEPA process to go forward expeditiously.
19 MR. LOMAN: Thank you.
20 MR. DROEGE: Hi, I'm Michael Droege. I'm the President
21 Elect of the Anchorage Board of Realtors. I sit on the State
22 Board of Realtors and I'm the Realtor Political Action
23 Committee, one of our -- the three Trustees in this state.
24 I was born and raised in Alaska. I moved out of the State
25 once for six months to L.A. where all of our supposed

1 opposition, or a lot of it, comes from. The point of my
2 comments are first, personal, and then professional.
3 Growing up in the State of Alaska, I've seen industry
4 after industry after industry being shut down because the answer
5 to most developmental questions from environmental groups is not
6 maybe, but no. In this particular project, doing the simple
7 math, we've spent nearly \$400 million, at this point, studying
8 on a lease sale that generated \$2.7 billion, nearly 17 percent,
9 somewhere in that, just going off the top of my head, in
10 studying. We studied our way out of the timber industry. We've
11 studied our way out of all kinds of economic activity.
12 Now the realtors are a very diverse group of people, as
13 you can imagine. And we have a lot of different opinions on
14 social issues, on environmental issues. But the one issue that
15 we coalesce around is economy. If it works, we're for it in a
16 responsible way. If it doesn't work, then we'll sit back and
17 assess it but the last answer to the question cannot always be
18 no, it must be maybe.
19 The studies have been completed. With all due respect to
20 the people that come here to advocate on behalf of the
21 environment, the group of people that you see in front of you
22 that are for it, a lot of us are hunters, fishers. We've spent
23 time in Prince William Sound. We spend time on the tundras out
24 in Western Alaska. We're up in the Arctic Slope. We've been up
25 to the Wrangell Mountains, hunting.

1 There's no more environmentally conscious or conservation
2 minded people than the people that live here, want to work here,
3 want to continue to have our children do the same as we've been
4 privileged to do. So I encourage you, Jeff, keep rolling.
5 Thank you.
6 MR. LOMAN: Thank you. Cathy Giessel, Representative
7 Cathy Giessel? Doug Smith?
8 UNIDENTIFIED MALE: He's gone. Doug Smith is gone.
9 MR. LOMAN: Michael. Nikos I'm sorry.
10 MR. PASTOS: I'll make it quick.
11 UNIDENTIFIED MALE: Thank you.
12 MR. LOMAN: Thank you. Sorry about that.
13 MR. PASTOS: My name is Nikos Pastos and I was born here
14 in Anchorage, didn't come here to get rich. I'm an
15 Environmental Sociologist, so I study technological disasters
16 and the social impacts of technological disasters of the oil
17 spills.
18 My comments here are on behalf of the Center for Water
19 Advocacy. I'm on the Board of Directors for a nonprofit public
20 interest law firm. And simply, our comments are focused at --
21 there's three natural resource trusts in the United States.
22 There's the State, the Federal government, which is Federal
23 Agencies, and Tribal governments. And our comments will
24 incorporate a lot of the aspects of conversancy. And there will
25 be an extensive written form. All I want to do is simply

1 summarize a couple of points.
2 We also are completely aligned with the Alaska Inter-
3 Tribal Council's Resolution 200508 which opposes Outer
4 Continental Shelf drilling and drilling in the Arctic National
5 Wildlife Refuge. There is a Federal trust responsibility, it's
6 an Executive Order that government Agencies have to consult on a
7 government to government on par basis with Tribal governments.
8 I think it's legally questionable whether Tribal governments
9 have been included in the original scoping process for the EIS
10 that we're talking about in the Sale 193.
11 Furthermore, we completely support the Native village of
12 Point Hope and their Resolutions against the offenses to the
13 peace and dignity of humankind. Which, I may be paraphrasing
14 the title of it, but there's a -- Point Hope has a Resolution
15 opposing Outer Continental Shelf oil development and drilling in
16 the Arctic National Wildlife Refuge.
17 So, given the Gulf of Mexico Deepwater Horizon tragedy
18 which, again in the news today, there's absolutely no scientific
19 proof that we can adequately clean up spilled oil in broken ice
20 conditions. It's -- environmentally that's too big a risk to
21 take in the Arctic Ocean. Arctic Ocean is much more complex
22 than the studies that we've spent so much money on.
23 As far as Shell Oil spending so much money, good. We're
24 going to hold your feet to the fire and get you to get, you
25 know, the best valid peer review -- science available. Beyond

1 that, the Tribal governments have the only valid claim in the
2 Arctic. The State of Alaska has a fraudulent claim and the
3 United States' claim is not fully substantiated when it comes to
4 who owns our Outer Continental Shelf.

5 So, in the summary, Center of Water Advocacy is in support
6 of Resolutions that are standing through the Alaska Inter-Tribal
7 Council, and especially with the Native Village of Point Hope.
8 This is not just about billions of dollars, it's about the
9 health of the oceans and the future of customary and traditional
10 life ways of indigenous peoples who have lived in the Arctic
11 since time immemorial.

12 This is just no simple quick rush oil lease. And so we
13 can afford to do a fair and decent and adequate process of
14 looking at this. Thank you.

15 MR. LOMAN: Thank you. Geoff.

16 MR. HADDAD: All right. It's kind of funny talking to
17 this mic. I'm not sure it works. All right, I'll talk into it.
18 My name is Geoff Haddad and I'm the Alaska Exploration Manager
19 for Conoco Phillips. Thank you for the opportunity to speak
20 here tonight at this public meeting.

21 Conoco Phillips favors developing all forms of energy,
22 conventional, renewable and alternative. However, we recognize
23 that even with aggressive alternative energy research and
24 development, most sources estimate that fossil fuels will still
25 represent more than 80 percent of the world's total energy

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1 supply, even by 2030.

2 In addition, the United States currently produces only
3 approximately 40 percent of the oil it uses each day. So the
4 majority of our oil must be imported. Given this background in
5 the analysis and studies that support the decision to lease in
6 the Chukchi Sea, Conoco Phillips strongly encourages the Bureau
7 of Ocean Energy Management to firm the leases as issued in 2008.

8 Conoco Phillips sees great potential in the Chukchi Sea as
9 evidenced by our investment to \$506 million on 98 OCS leases.
10 And Conoco Phillips has also invested tens of millions of
11 dollars on environmental studies, working with other offshore
12 operators, universities, research institutions and local
13 stakeholders on a multi-year program collecting biological,
14 oceanographic and air quality data in the Chukchi Sea. This
15 program has been well received by the North Slope communities
16 and several environmental groups.

17 As one of the largest owners of State and Federal leases
18 in Alaska, a major owner in the three largest oilfields on the
19 Alaska North Slope, operator of both Kuparuk and Alpine
20 Oilfields, and operator in the Alaska Cook Inlet, Conoco
21 Phillips has over 40 years of safe and environmentally
22 responsible operating experience in Arctic conditions. We bring
23 decades of experience in preparing our permit applications and
24 operational plans for activities in the Arctic.

25 Alaska's North Slope production continues to decline with

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1 TAPS currently flowing at a third of the pipeline capacity.
2 Persistent onshore exploration in Alaska has not resulted in oil
3 discoveries sufficient to fully extend the decline and supply to
4 TAPS. The Arctic OCS waters, particularly the Chukchi Sea, have
5 potential to significantly extend the life of TAPS.

6 So Conoco Phillips believes progress is needed on
7 exploring the lease to that acreage in the OCS, including the
8 Chukchi Sea. We are committed to explore the Chukchi Sea lands
9 responsibly with respect for the environment, and in a manner
10 that also respects the subsistence way of life of the residents
11 of the Alaska's North Slope.

12 We believe the Supplemental EIS addresses the three issues
13 raised by the U.S. District Court of Alaska and that the leases
14 awarded in 2008 should be affirmed. We intend to provide more
15 comprehensive written comments by the November 30th deadline.
16 Thank you.

17 MR. LOMAN: Joseph Liska. And then Christine Klein.
18 Christine in here? You're next. Followed by Len Horst.

19 MR. LISKA: Good evening my name is Joe Liska. I'm a 40
20 year resident of Alaska. Never thought I'd be here this long,
21 but I have to say that I'm probably as environmentally conscious
22 and as environmentally conservative as anybody in this room.
23 I've worked for BP Alaska for -- for BP for 24 years and now I
24 work for a Native Corporation, so I've built a livelihood here.
25 I've built family here, and I'll probably going to be buried in

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1 buried in this State.

2 And I've heard a lot of pros and cons about development
3 but the big idea is this. When the Pilgrims came over here, if
4 they would have had to complete an EIS comparable to what Shell
5 is going through, we would never have developed America. And
6 the big idea is even this, we are a country of doers and
7 explorers and producers. And we've always been that way. But
8 in the last two decades, this country has taken a turn to the
9 left. A turn, which I believe, is prejudicial to the future of
10 this country as a world leader, give that whatever you want it
11 to be.

12 Certainly, scientific studies are important. But we have
13 studied this to death. Also what's not -- I haven't heard here
14 -- there are Arctic countries which could be threatened by --
15 more by an oil spill than our own coastline could be threatened
16 in the Arctic, because of the distances from where these leases
17 actually exist. And these wells are going to be drilled from an
18 exploration standpoint in open water. Yes, there are threats
19 for ice. There's always threats. But what's missing in all of
20 this is the thread that Americans are doers. They are creators.
21 We wouldn't have gone to the moon, we wouldn't have done other
22 creative things if we would just -- if we would have let people
23 with that whisper say to us, we can't do it. You can't do it.
24 You'll never be able to do this. That is a big problem.

25 Obviously, I'm pro-development. Thank you.

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1 MS. KLEIN: For the record, my name is Christine Klein.
2 I'm the COO of Calista Native Corporation. We are one of the
3 largest Native Corporations in Alaska but, unfortunately, one of
4 the poorest socio-economically, and one of the poorest regions
5 actually in the United States.

6 I want to bring up that our Corporation represents more
7 than 13,000 direct shareholders and 20,000 descendants of Yupik,
8 Cupik and the Athabascan heritage. And that is 56 villages in
9 Alaska and the Yukon Kuskokwim Bering Sea coast. Our
10 shareholders, the cheapest airfare to get here was \$600, the
11 average was \$1,200, and due to the large distances in our Region
12 and the lack of infrastructure, basic infrastructure.

13 Many of our shareholders continue to live in remote
14 villages, which experience higher costs of living than you can
15 imagine. Especially, when it comes to fuel and heating oil
16 which, due to the lack of transportation infrastructure, people
17 have to travel by boat up the rivers, by aircraft and airports
18 in the State and snow machines in winter. Fuel is currently
19 three to five times higher than you're seeing at the pump here
20 in Anchorage. And, of course, much higher than the rest of the
21 United States. Heating fuel often costs \$13 a gallon right now
22 in our Region.

23 I would like to remind you here, my fellow citizens in
24 Alaska as well as others, that the people in Emmonak had to
25 choose between fuel and staying warm and food in the Village of

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1 Emmonak last winter. And that will probably happen again this
2 winter. We are tired of being forgotten, treated like a colony
3 and being used. Imagine if this would happen to you, here in
4 Anchorage even, \$13 a gallon, let alone the rest of the United
5 States. If that were to happen to you, do you think we would be
6 here having these questions asked of us?

7 Calista supports OCS development in an environmentally
8 safe drilling manner. We want to see MMS, BOEM, I'm sorry,
9 Lease Sale 193 affirmed as intended in 2008 for the purposes of
10 producing oil and boosting domestic oil production from our
11 existing resources and energy here in Alaska, as well as helping
12 the economy of the United States.

13 We have many points. I'm not going to go through them. I
14 know everyone is very tired and it's extremely hot in here. But
15 the second two points are that, we have confidence in the
16 existing regulatory and scientific community of Alaska. Those
17 regulators and scientists have risen to the challenges of
18 responsibly overseeing offshore oil and gas development. And we
19 are comfortable that they will ensure the protection of vital
20 wildlife and water resources.

21 I also wanted to point out that the State of Alaska,
22 having been a former regulator and I worked for the State in the
23 past, has one of the first and only Pipeline Petroleum
24 Inspection and Oversight Programs in the United States. So
25 while we're the youngest State and Department in the U.S., or

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1 one of the few, we do have programs. And so we are very pro-
2 active in the State.

3 The petroleum industry, third, has demonstrated that it
4 can, in fact, operate safely in Arctic and sub-Arctic
5 conditions. All of these things, along with the intense
6 scrutiny that occurs in Alaska, case in point here, and the
7 tough permitting processes in our State give us confidence in
8 our Region that the exploration and development can occur in the
9 OCS safely to all creatures, great and small. Thank you.

10 MR. LOMAN: Thank you.

11 MR. HORST: I'm not sure if I should say good evening or
12 good morning, the way the clock is going here. But for the
13 record, my name is Leonard Horst.

14 I wanted to speak to the issue of Lease 193 from three
15 perspectives tonight and strongly encourage the Bureau to move
16 forward quickly so we can get on with development here in
17 Alaska.

18 First of all, I want to speak as an Alaskan. I'm a
19 relative newcomer here. I've only been here since 1977, but I
20 am privileged to be married to a third generation Alaskan. Our
21 kids we call fourth generation, and looking forward to the fifth
22 coming on soon.

23 I've been privileged to travel to every corner of this
24 State. I have, through work, had the chance to -- many of the
25 things that Michael talked about, hunting and fishing, all

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1 across the State. And having done business in many, many
2 places. I'm excited about Alaska's future. But I'm also really
3 concerned about the message that we're sending right now with
4 the delays that we have undertaken on this project, in
5 particular.

6 Secondly, I have the privilege of serving as a Senior Vice
7 President of Northrim Bank and manage their commercial and
8 industrial banking across the State. As a banker and as an
9 economist, I got to tell you, I'm extremely concerned about
10 where we are right now. We have not suffered like our friends
11 and neighbors in the Lower 48 have. But believe me when I say
12 it, we are on the verge. It is absolutely time for us to move
13 forward with development in this State. We were founded as a
14 State based on our ability to stand upon our own resource base.
15 And that is what we need to do, and we need to do it now.

16 Finally, I have also the privilege of serving on the
17 Resource Development Council's Executive Committee and Board of
18 Directors. And I joined that group simply because of their
19 mission which is to responsibly develop the natural resources
20 of the State of Alaska. I believe we've proven we can do it. I
21 think it is again, time for us to do it again, and do it now.

22 I again urge you, as the Bureau, to move forward as
23 quickly as possible and affirm Lease Sale 193. Thank you.

24 MR. LOMAN: Lois Epstein.

25 MS. EPSTEIN: There are actually a few things that haven't

KRON ASSOCIATES
1113 W. Fireweed Lane, Suite 200
Anchorage, Alaska 99503
(907) 276-3554

1 haven't been said today, so far, so I'll try and hit on those.
2 My name is Lois Epstein and I am Arctic Program Director for the
3 Wilderness Society. I'm a Licensed Engineer in Alaska. I've
4 spent over 20 years working on oil and gas technical and policy
5 issues as a private consultant and as an employee of nonprofit
6 organizations. I served on Federal Advisory Committees for U.S.
7 DOT on pipeline safety and for U.S. EPA on refining. And I was
8 a Technical Advisor on the report to the President in May 2010
9 which contained recommendations on increasing offshore drilling
10 safety.

11 In September I served on a Bureau of Ocean Energy
12 Management panel in Houston on safety. My message was that,
13 business as usual is unacceptable to the public. And that
14 significant regulatory inspection and enforcement changes are
15 needed, as well as transparent performance reporting by industry
16 and government.

17 With respect to the Arctic, I focused on the fact that a
18 key safety concern is going to be related to human factors, a
19 major cause of accidents. Because of the cold and the darkness
20 in the Arctic, which we're all familiar with, human factors
21 likely would be a greater concern than elsewhere. Moreover,
22 frontier and pristine areas always require extra precautions and
23 extra safety factors.

24 The Wilderness Society's position is that the Bureau needs
25 to take the time needed to make scientifically justified

1 decisions before allowing drilling in the Chukchi. This
2 includes reassessing which scientific information in Appendix A
3 of the draft SEIS is obtainable, at a cost that is not
4 exorbitant, rather than the Bureau dismissing the need to gather
5 such information all together. In effect, the Bureau states in
6 the draft SEIS, that it has decided to allow drilling regardless
7 of the impacts. The public needs to know those impacts and in
8 as specific detail as possible, for rational decision making.

9 I was hired on to improve oil and gas operations. I'm not
10 opposed to them in Alaska. They just have to be as good as
11 possible and made in a rational way, the decisions. If there is
12 any doubt about blowouts and other offshore problems in the
13 Arctic, consider the following events which also occurred in
14 Alaska's shallow offshore areas in Cook Inlet.

15 1985. There was a gas blowout, contrary to what we've
16 heard earlier, that we had no blowouts in the State, at the
17 Grayling Offshore Platform, which shut down production.

18 1987-1988. A gas blowout at the Steelhead Offshore
19 Platform occurred while drilling an oil production well. Fire
20 burned for one week. While drilling the relief well, another
21 blowout occurred. The relief well was finally completed in
22 August of 1988.

23 1989. Amoco's Anna Offshore Platform caused a spill of
24 over 20,000 gallons of crude. Clean-up was not attempted due to
25 80 to 90 percent moving ice flows in Cook Inlet.

1 As some of you, possibly Jeff may have done, I woke up at
2 five a.m. yesterday and today to watch the Oil Spill
3 Commissions, two days of hearings in D.C., the causes of the
4 Deepwater Horizon tragedy. Director Bromwich from the Bureau
5 today noted the extreme sensitivity of the Arctic environment
6 and its marine resources and their importance to subsistence, as
7 well as the region's spill clean-up challenges.

8 On a technical level, the two days of hearings may clear
9 how well-financed drilling companies nevertheless could,

10 One, misinterpret data from a key integrity test.

11 Two, decide not to utilize potentially critical well
12 components known as centralizers, because they would take too
13 long to arrive. And imagine that kind of situation occurring in
14 the Arctic where it'd be much worse in terms of timing.

15 Three, the companies decided not to take actions that
16 would have mitigated much of the tragedy, possibly because it
17 all occurred so quickly. For example, using the platform's
18 divert-a-system (ph) to mitigate some of the damage.

19 What the hearings, these past two days, demonstrate is
20 that no matter how good the regulatory oversight, and everyone
21 acknowledges that the Bureau needs regulatory improvements,
22 there will be infrequent but highly tragic spill events. This
23 information, combined with a clear need for collection analysis
24 of scientific data on the Arctic's natural resources which was
25 recognized by the Court, demonstrates that the Bureau is not

1 ready, at this time, to proceed with offshore drilling in the
2 Chukchi. The Bureau should not rush through the EIS process
3 like a student rushing to complete a term paper, as quickly as
4 possible. Thank you for this opportunity.

5 MR. LOMAN: Thank you. So tomorrow morning I have a press
6 interview that I have to give. And here's what I'm going to
7 say.

8 That at 10:00 p.m. we had to close this hearing. I
9 apologize to those that we didn't get to hear from. Here's what
10 I'm going to tell them. They didn't come because Ted Danson was
11 here. They didn't come because they wanted get some movie
12 star's autograph or get on TV. They came because they care
13 about Alaska, about the economy, about the environment.

14 Whatever your passion and position is, I appreciate the
15 fact that everyone of you left in this room is, sat here and
16 listened to this testimony. And I apologize to those that we
17 didn't get to hear from tonight. We will take your written
18 comments and we will, by law, respond to those in the final
19 document.

20 Thank you and good night.

21 (off record at 10:00 p.m.)

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TRANSCRIBER'S CERTIFICATE

I, Judy Bradshaw, hereby certify that the foregoing pages numbered 4 through 100 are a true, accurate and complete transcript of the Bureau of Ocean Energy Management Regulation and Enforcement Public Hearing regarding the Environmental Impact Supplemental Statement Relating to Chukchi Sea Sale 193 held in Anchorage, Alaska on November 9, 2010, created by me from log notes plus typed presentations, as well as a copy of the electronic sound recording, to the best of my knowledge and ability.

Dec. 15, 2010


Judy Bradshaw

Date

Draft SEIS
Comment Letters

Federal Government
Tribal Governments and Alaska Native Organizations
State Government
Local Government
Environmental Organizations
Corporations and Industry Groups
General Public

Federal Government



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TIBETAL, AND
POLAR LAW AND

November 29, 2010

John Goll, Regional Director
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Re: U.S. Environmental Protection Agency (EPA) Comments on the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Draft Supplemental Environmental Impact Statement (EIS) for Chukchi Sea Lease Sale 193, EPA Project # 05-049-MMS

Dear Mr. Goll:

We have reviewed BOEMRE's Draft Supplemental EIS for Chukchi Sea Lease Sale 193. Our review of the EIS was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the EIS considers the expected environmental impacts as well as the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

EPA recognizes that the limited scope of the EIS (evaluation of natural gas development and production, and missing or incomplete information and cost) is in response to the U.S. District Court, District of Alaska order. This order directed BOEMRE to address these deficiencies identified in the initial EIS.

We believe that BOEMRE has produced a succinct document that clearly addresses these deficiencies. We are particularly pleased with the methodical and understandable analysis of incomplete or missing information in Appendix A. We also believe the process employed by your agency fully meets the intent of the Council of Environmental Quality's requirements for such situations. Additionally, the analysis of potential impacts from possible gas exploration, development and production is quite thorough, with clear indication of relatively minor impacts (with the potential exception of unknown archeological resources) from such activities.

Based on our review and, in part due to the limited scope of the analysis, we have assigned a rating of LO (Lack of Objection) to this EIS. A summary of our rating system is enclosed.

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REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

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If you have any questions concerning our rating, please contact Jennifer Curtis of my staff in Anchorage at 907-271-6324 or by email at curtis.jennifer@epa.gov. Thank you for the opportunity to review this EIS.

Sincerely,

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure



MARINE MAMMAL COMMISSION

6 December 2010

U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment, February, 1987.

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Mr. John T. Goll, Regional Director
Alaska Outer Continental Shelf Region
Bureau of Ocean Energy Management, Regulation, and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Dear Mr. Goll:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Supplemental Environmental Impact Statement for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193. The Bureau prepared the draft statement as a supplement to its 2007 Final Environmental Impact Statement for Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea. The Commission also has reviewed the Bureau's 5 October 2010 *Federal Register* notice (75 Fed. Reg. 61511) requesting comments. When appropriate, the Commission will comment in detail on site-specific activities associated with oil and gas operations in the Chukchi Sea Planning Area. For now, the Commission offers the following recommendations and rationale.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement—

- consider and adopt a slow, phased approach to oil and gas development in the Chukchi Sea Planning Area by limiting initial operations to one or two active lease areas until the Bureau, industry, and all responsible parties have demonstrated their ability to conduct oil and gas operations safely in this region, have developed means for responding to oil spills in icy waters, and have collected needed baseline information on the marine wildlife and habitat at risk from such operations;
- strengthen its supplemental environmental impact statement by providing a more complete description of the added risks associated with natural gas extraction, including a large-scale spill or loss of well control, prolonged use of platforms in the harsh Arctic environment, and construction and maintenance of the proposed gas pipeline;
- work with other agencies with related responsibilities, the oil and gas industry, conservation organizations, and other stakeholders to develop standards and seek resources for baseline research and monitoring in areas under consideration for oil and gas development, including the Chukchi Sea Planning Area; such standards must take into account the rapidly changing conditions in the Arctic; and
- work with the Department of Energy and related agencies to develop a national energy policy that will reduce the environmental risks being imposed by the nation's current dependence on oil and gas for energy.

RATIONALE

The purpose of an environmental impact statement prepared under the National Environmental Policy Act is to inform decision-makers and the public about the environmental risks associated with various alternative approaches to a proposed federal action, including a no-action alternative. From the Commission's perspective, the three main concerns or issues associated with oil and gas development in the Chukchi Sea Planning Area are (1) a major spill that exposes the Chukchi and Beaufort Sea ecosystems to large amounts of crude oil, (2) a long-term, cumulative degradation of those ecosystems to the extent that species (including some that are threatened or in danger of extinction) abandon preferred habitat or are otherwise adversely affected by habitat degradation, and (3) a shift in the distribution of wildlife, including marine mammals, such that they are less readily available to Alaska Natives for subsistence. Whether and to what extent these concerns are realized in the Chukchi Sea may well depend on the spatial and temporal pattern of oil and gas development in the areas included in lease sale 193.

After reviewing the subject documents, the Commission believes that the most environmentally cautious way to manage oil and gas development in the Chukchi Sea is through a slow, phased approach that initially limits the amount of oil and gas development to one or two active lease areas until the responsible agencies have collected essential baseline information on the wildlife and habitat in the Chukchi Sea Planning area, the industry has demonstrated its ability to produce oil and gas safely in such a harsh environment, and the agencies and industry together have developed more reliable means to mitigate and monitor the ever-present risks and respond effectively to a large-scale accident. Such an approach would allow the Secretary of the Interior to pursue oil and gas development as required under the Outer Continental Shelf Lands Act but would balance that development against environmental risk by proceeding slowly and cautiously.

The coastal-offshore distinction that forms the basis for the alternatives reflects a continuum of risks from oil and gas operations, including—

- the propensity for wildlife and habitat disturbance during exploratory drilling, construction, and production;
- the likelihood of oil from a major spill contacting wildlife (marine mammals, seabirds, fish, invertebrates) and habitat, including polynyas and leads off the northwestern coast of Alaska and productive benthic communities located offshore;
- the nature and degree of weathering of spilled oil before it reaches particularly sensitive areas and, therefore, the nature of the risks that weathered oil poses to those areas or the wildlife dependent upon them;
- the potential for disruption of subsistence hunting;
- the length of oil and gas pipelines from platforms to shore and the implications for a pipeline accident involving oil, gas, or both; and
- the ability of industry, the Coast Guard, and others to respond to a spill.

These and other considerations all pertain to the nature and extent of risk from oil and gas activities to the Chukchi Sea marine ecosystem. Still, the Commission recognizes that the Secretary must balance the environmental risks against our nation's energy needs. To achieve that balance, the

Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement consider and adopt a slow, phased approach to oil and gas development in the Chukchi Sea Planning Area by limiting initial operations to one or two active lease areas until the Bureau, industry, and all responsible parties have demonstrated their ability to conduct oil and gas operations safely in this region, have developed means for responding to oil spills in icy waters, and have collected needed baseline information on the marine wildlife and habitat at risk from such operations.

The Environmental Impact of Natural Gas Development

One area where the Commission believes that the Bureau could strengthen the supplemental environmental impact statement is in its description of the risks associated with natural gas development. On this topic, the supplemental impact statement provides little information and then argues that the lack of information is not a concern because any relevant information would not help distinguish between the action alternatives. Here the Commission disagrees with the Bureau for the following reasons. First, if one of the major concerns with regard to oil and gas development is a blowout or loss of well control, then the Bureau should provide a description of the added risk associated with producing both oil and gas during the later stages of oil extraction. How are both oil and gas extracted simultaneously, and how does the extraction of the gas affect the probability of a serious accident? If gas production adds appreciably to the risk of a blowout or loss of well control, then decision-makers should take that added risk into account when determining when and where drilling will be allowed.

Second, what are the added risks associated with the shift from a primary focus on extraction of oil to extraction of gas, which will require extending the life of the platforms for several more decades? Given the harsh conditions in which these platforms are built and maintained, how does the addition of several decades of operation affect the risks of a platform failure?

Third, when and how will the additional pipeline for gas be built and how will that affect the risks to the environment? If the gas pipeline is constructed concurrently with the oil pipeline, does it simply lie inactive for 10 to 20 years before it is used and, if so, how does that affect the integrity of the pipeline and the risk of an accident? If it is constructed just prior to the initiation of gas recovery operations, then the impact statement should account for the additional disturbance caused by the second construction period.

Each of these considerations may not help decision-makers distinguish between the action alternatives, but they do help decision-makers account for the full effects of the proposed operations and thereby distinguish between the no-action and action alternatives. Because the no-action alternative should be considered seriously, the Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement strengthen its supplemental environmental impact statement by providing a more complete description of the added risks associated with natural gas extraction, including a large-scale spill or loss of well control, prolonged use of platforms in the harsh Arctic environment, and construction and maintenance of the proposed gas pipeline.

Gathering Missing Information

In general, anticipating and preventing effects on marine mammals from oil and gas operations in the Chukchi Sea requires good knowledge of the species' population status; distribution and movements; ecology, habitat use, and behavior; and vulnerability to other risk factors. Some Arctic marine mammals (e.g., bowhead whales) have been relatively well studied, whereas others are still poorly understood and/or in a state of flux that makes it difficult to characterize their potential vulnerability to the proposed oil and gas operations (e.g., walrus). Therefore, much of the baseline information that is generally deemed essential for assessing (identifying and measuring) changes caused by human activities is lacking. Scientists attempting to assess the effects of the Exxon Valdez oil spill found that their analyses were confounded, if not made impossible, by lack of baseline information for some species. Similarly, baseline information for marine mammals in the Gulf of Mexico is proving inadequate for detecting and measuring potentially significant impacts from the Deepwater Horizon oil spill.

The methods for collecting such information exist and the costs of doing so are not exorbitant, particularly when viewed in the context of the billions of dollars involved in oil and gas development. Examples of methods for studying status include surveys or other means (e.g., mark-recapture) of estimating abundance and trends (e.g., Ashjian et al. 2010, George et al. 2004); satellite telemetry for characterizing distribution and movements (e.g., Quakenbush et al. 2010a, Quakenbush et al. 2010b); time-depth recorders, visual and acoustic surveys, and a wide variety of electronic tags for assessing habitat use (e.g., Laidre et al. 2002, Moore et al. 2010a); and observations of feeding animals and investigations of stomach contents for investigating prey and feeding behavior (e.g., Moore et al. 2010b, Lowry et al. 2004). Conducting such studies is certainly a challenge because of the difficulty of working in the Arctic environment, but the methods exist and are being applied. The major limitation has not been scientific or technological; instead, it stems from a failure to commit sufficient resources to these studies in advance of planned oil and gas development. Simply put, the failure to commit the resources needed to conduct such studies undermines our collective efforts to implement a science-based approach as we seek to limit the impacts of human activities on ocean resources.

The Commission has long argued that the industry and regulatory agencies have a responsibility to support the kinds of research needed to investigate the potential effects of oil and gas operations. In fact, the former Minerals Management Service has contributed significantly to marine mammal science over past decades. In recent years, the industry also has contributed significantly to such research. However, the resources provided still fall short of what is needed, and the Commission believes that the Bureau and the industry need to find additional means of supporting essential research. The industry, in particular, should provide more support because the risks stem from their activities and the amounts in question are trivial compared to the annual profits of oil and gas companies. Addressing these risks in a responsible manner should be considered a cost of doing business for this industry.

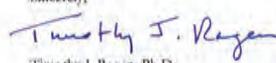
The Commission believes that the development of a rigorous program of scientific research on the wildlife and habitat in the Chukchi Sea Planning Area is well within our scientific capacity and would require the commitment of only a very small fraction of the total cost of developing and operating oil and gas facilities in this region. With that in mind, the Marine Mammal Commission

recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement work with other agencies with related responsibilities, the oil and gas industry, conservation organizations, and other stakeholders to develop standards and seek resources for baseline research and monitoring in areas under consideration for oil and gas development, including the Chukchi Sea Planning Area. Such standards must take into account the rapidly changing conditions in the Arctic. The Commission would be pleased to work with the Bureau to accomplish this goal.

The Bureau's Responsibility in Developing a National Energy Policy

Undoubtedly, oil and gas will continue to be major sources of energy for the United States for decades to come. However, the pattern that we are seeing is that oil and gas operations are shifting into areas where drilling and production impose increasing risks. Such drilling and production may be necessary, not just because of decisions made in the past year or even the past few administrations, but because for decades we as a nation have failed to develop and implement a national energy policy, despite the predictable complications that we are now facing. On a number of occasions, the Marine Mammal Commission has written to the former Minerals Management Service recommending that the Service work with the Department of Energy to develop a national energy policy that, over time, would result in a shift away from our reliance on oil and gas development in high-risk areas. To be sure, such a policy would not provide immediate relief from those risks but should put our nation on a path that reduces the risks faced by future generations. The Bureau and the Department of Energy already may be working on such a policy; if so, it would be useful to engage other agencies and the public to help shape and develop the policy and, particularly, to facilitate its implementation. To reduce the likelihood that future generations are faced with energy challenges similar to or worse than those we are facing now, the Marine Mammal Commission recommends that the Bureau of Ocean Energy Management, Regulation, and Enforcement work with the Department of Energy and related agencies to develop a national energy policy that will reduce the environmental risks being imposed by the nation's current dependence on oil and gas for energy.

The Commission hopes you find these recommendations helpful. Please contact me if you have questions about our recommendations or if we can provide any further assistance.

Sincerely,

Timothy J. Ragen, Ph.D.
Executive Director

cc: Michael R. Bromwich, Esq.

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Mr. John T. Goll
6 December 2010
Page 6

Marine Mammal Commission Comment

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February 28, 2011

James Kendall
Acting Regional Director
Bureau of Ocean Energy Management,
Regulation and Enforcement
Alaska Outer Continental Shelf Region
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5823



Subject: Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Draft Supplemental Environmental Impact Statement (Draft SEIS) for the Chukchi Sea Planning Area - Oil and Gas Lease Sale 193 in the Chukchi Sea.

Dear Mr. Kendall:

The National Marine Fisheries Service (NMFS) has reviewed the subject Draft SEIS which analyzes natural gas development and production scenarios and incomplete, missing, or unavailable information for Lease Sale 193. We apologize for commenting outside the public review period, but offer these comments from our Protected Resources Division, Habitat Conservation Division, and the Alaska Fisheries Science Center to assist in your decision-making process.

The Draft SEIS evaluates the four alternatives presented in the Alaska Outer Continental Shelf (OCS), Chukchi Sea Planning Area Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea Final Environmental Impact Statement (FEIS), May 2007. Alternative I (Proposed Action) would lease 6,156 whole or partial blocks, which covers approximately 34 million acres within the Chukchi Sea. Alternative I would exclude the 25 Statute Mile buffer implemented by the Secretary in the Final OCS Leasing Program for 2007-2012. Alternative II (No Lease Sale) would not reaffirm Lease Sale 193. Alternative III (Corridor I Deferral) is the Proposed Action minus a corridor extending 60 miles offshore along the coastward edge of the proposed sale area in an attempt to reduce potential impacts to subsistence hunting and various wildlife species and habitats. This would lease approximately 1,765 whole or partial blocks comprising 9.1 million acres. Alternative IV (Corridor II Deferral) is the Proposed Action minus approximately 795 whole or partial blocks along the coastward edge of the sale area. The Corridor II deferral area is a subset of the Corridor I area.

Lease Sale 193 was held in February 2008 consistent with Alternative IV (Corridor II Deferral). BOEMRE notes however, that upon reviewing the Final SEIS, the Secretary will select one of the four alternatives in the Draft SEIS, which could reaffirm, cancel, or modify Sale 193.



ALASKA REGION - www.fakr.noaa.gov

National Marine Fisheries Service Comment

General Comments

As NOAA has commented in the past, we remain very concerned about potential impacts to living marine resources and their habitats, fisheries, and subsistence uses of marine resources as a result of lease sales, exploration, and development in the Chukchi Sea Planning Area (CSPA). The individual and cumulative effects of development in this relatively pristine environment could be significant. The Arctic waters are experiencing a change in oceanic condition, and the effects to marine resources and their movements are uncertain. Any proposals for development in this area should fully account for the associated environmental, economic, and social consequences to ensure the continued productivity of living marine resources for future generations.

In 2006, the North Pacific Fishery Management Council began considering options for fishery management in the Arctic. Ultimately, the Council decided to take a precautionary approach, voting to prohibit commercial fisheries in the Arctic Management Area (federal waters north of Bering Strait) until sufficient information on the Arctic marine environment is available to sustainably manage commercial fishing.

The Draft SEIS recognizes that not all Essential Fish Habitat (EFH) has been determined yet in the Chukchi Sea. For several life stages of various fish species in the Chukchi Sea NMFS simply does not have enough information to designate EFH. Such data gaps heighten the need to obtain a better understanding of the ecosystem and for BOEMRE to also take a precautionary approach regarding potential activities in the Chukchi Sea.

Marine Mammal Issues

NMFS is proposing to list four subspecies of ringed seals, found in the Arctic Basin and the North Atlantic, and two distinct population segments of bearded seals in the Pacific Ocean, as threatened under the Endangered Species Act. Please visit our website <http://www.fakr.noaa.gov/protectedresources/seals/ice.htm> for more information.

In Chapter II, **Alternatives, Mitigation Measures, and Issues in the 193 FEIS**, as part of the description of Alternative III (Corridor I Deferral), BOEMRE notes that this alternative is to protect important bowhead whale habitat used for migration, feeding, nursing calves, and breeding. NMFS concurs that Alternative III would provide some degree of impact reduction for the endangered bowhead whale, as this population migrates through the nearshore lead system of the sea ice during its spring migration into the Beaufort Sea. The spring lead system is one of the most sensitive environments for these whales. Alternative III would also afford some mitigation and avoidance for the Native villages along the Chukchi coast which depend on subsistence resources, especially marine mammals.

NMFS notes that the Draft EIS contains some misinterpretations or omission of existing scientific references that, when corrected, do not affect conclusions of the Draft SEIS. For example, on Page 27 the Draft EIS reads, "Because fall migrating bowhead whales are not expected to use the deferred area, fall bowhead encounters with oil and gas-related industrial noise and oil spills would be the same as for Alternative I (Proposed Action)." The 2008-2010 BOEMRE-sponsored COMIDA (Chukchi Offshore Monitoring in Drilling Area) marine

National Marine Fisheries Service Comment

mammal aerial surveys completed with NMFS have observed bowhead whales migrating within the deferred area during the fall. While the Final Report on COMIDA surveys has not been sent to BOEMRE, all of the information has been presented as Annual Reports which could be utilized to ensure the most current information is presented.

In Chapter III, **Description of the Environment**, the Draft SEIS information on bowhead whales use of lead systems to transit to summering grounds in the Canadian Beaufort Sea is no longer supported by the recent satellite tagging studies. NMFS recommends incorporating the information found in the BOEMRE-sponsored study "Satellite Tracking of Western Arctic Bowhead Whales." (Quakenbush et al. 2010).

NMFS has provided a more comprehensive list of current scientific information regarding marine mammals and their environment as an attachment to this letter.

Essential Fish Habitat

Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires federal agencies to consult on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. If a federal action agency determines that an action will not adversely affect EFH, no consultation is required, and the federal action agency is not required to contact NMFS about their determination. Please see our website for more information: <http://www.fakr.noaa.gov/habitat/efh.htm>.

The Draft SEIS noted that in 2006 BOEMRE consulted with NMFS regarding the potential effects to EFH of all five species of Pacific salmon, and that no additional EFH consultation is required for Pacific salmon as result of the Draft SEIS. NMFS would like to note that as a result of that consultation, in a letter to BOEMRE dated January 30, 2007, we recommended that BOEMRE select Alternative III (Corridor I).

Since the FEIS in 2007, EFH has been identified for Arctic cod, saffron cod, and opilio crab in the Fishery Management Plan for Fish Resources of the Arctic Management Area adopted by the Secretary of Commerce in August 2009. BOEMRE states that the agency is "...currently assessing whether additional consultation is required for potential effects of Sale 193 on Arctic cod, saffron cod, and opilio crab EFH."

In a summary of past relevant completed EFH consultations, BOEMRE refers to a Supplemental EFH Analysis completed in 2010 for Arctic cod, saffron cod, and opilio crab. The supplemental EFH assessment that BOEMRE provided to NMFS on May 4, 2010, analyzed anticipated activities in 2010 (July-December) in the Beaufort Sea and Chukchi Sea that included exploration drilling for oil and gas, geophysical and geological surveys (2D/3D seismic surveys), and anticipated ancillary activities (site clearance surveys). However, due to the administration policy on offshore drilling at that time, the consultation only addressed proposed surveys and anticipated ancillary activities. This consultation clearly stated that it did not encompass any other current or future activities which were not analyzed in the provided EFH assessment. Also, BOEMRE noted that designated opilio crab EFH was located at least 160 km (100 miles) south of proposed activities and therefore no assessments of impacts were

considered for this species. Thus, the scope of this 2010 supplemental EFH assessment does not include all activities and Arctic EFH species covered in Lease Sale 193.

It was difficult to find a clear determination in the Draft SEIS stating whether BOEMRE's preferred alternative may adversely affect EFH. In the Summary of Impacts section for the Alternative I, BOEMRE described effects to EFH using such terminology as: "temporary to short-term and at a negligible level" and "minor adverse impacts". Under this section for Alternative III (Corridor I Deferral), BOEMRE notes that "all of the potential effect categories remain the same as the proposed action, but the anticipated impacts would be lower due to the setback from the coast." Under Alternative IV (Corridor II Deferral), BOEMRE comments that "the primary benefit of the deferral of Corridor II under Alternative IV is that it would move sources of potential adverse effects further away from important fish habitats".

The Magnuson-Stevens Fishery Conservation and Management Act and its implementing regulations at 50 CFR 600.920 use specific terms regarding the level of effect on EFH and what constitutes an adverse effect to EFH. NMFS recommends using exact terminology from the Magnuson-Stevens Act and its regulations in future decision making documents to avoid confusion between our agencies and to ensure that the public can ascertain if the Magnuson-Stevens Act consultation requirements have been satisfied. BOEMRE should also clearly state for each alternative whether the proposed action may adversely affect EFH and if any EFH consultation would be within the scope of our programmatic EFH Consultation for Lease Sales.

While not clearly stated, this Draft SEIS does imply that EFH may be adversely affected. NMFS agrees. In 2008, BOEMRE chose Alternative IV (smaller deferral area) instead of Alternative III (larger deferral area). NMFS has previously recommended the larger deferral area which allows for more protection of NMFS' trust resources.

BOEMRE did adopt the mitigation measures that were outlined in the Draft EIS for Lease Sale 193, Section II.B.3 (and in the Draft SEIS Section II.C.1), which NMFS recommended in the 2007 consultation. However, this Draft SEIS does not mention mitigation measures for seismic survey activities, whereas the Draft EIS for Lease Sale 193 specifically did in Section II.B.4 and B.4.a. Our January 30, 2007 EFH consultation for the Lease Sale 193 Draft EIS recommended that these specific mitigation measures for seismic survey activities be part of the final lease sale. It is not clear in any of the documents if these were indeed part of the final sale. If BOEMRE adopts both mitigation measures, as listed in Section II.B.3 and Section II.B.4 and B.4.a in the Draft EIS, no further EFH consultation with NMFS will be necessary. BOEMRE should notify NMFS of their decision regarding this matter.

Fish Resources

The Draft SEIS includes a review of all statements in the FEIS that dealt with missing or incomplete information and evaluates whether the statements are (1) relevant to identifying potentially significant effects and (2) essential to making a reasoned choice (section 1502.22 Analysis).

Sixteen of the statements reviewed in the 1502.22 analysis section dealt with potential effects of seismic exploration in the Lease 193 area on fish stocks. Of these, four statements were not

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considered to be relevant to potentially significant effects. NMFS does not concur with the Draft EIS conclusion that the lack of empirical data to document potential impacts on fish populations from seismic surveys is not relevant to potentially significant effects. The actual statement notes that "experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur." This statement appears to be in contradiction to the response that the "available scientific information is sufficient to conclude that there will be no significant adverse effects." As such, NMFS believes this statement to be relevant and the lacking information is essential to making an informed decision. Thus, it seems the next step would be to address the issue of whether the cost to obtain the missing information is exorbitant, or the means of doing so unclear.

NMFS recommends BOEMRE consider two additional references in addition to the citation of Mecklenburg, Mecklenburg, and Thorsteinson, 2002 when describing the fish resources of the Alaskan Chukchi and western Beaufort seas:

1. Fautin et al. (2010) An Overview of Marine Biodiversity in United States Waters. PLoS ONE 5(8): e11914. doi:10.1371/journal.pone.0011914
2. Mecklenburg, C.W., D.L. Stern, B.A. Sheiko, N.V. Chernova, T. A. Mecklenburg, B.A. Holladay. 2007. Russian-American long-term census of the Arctic: benthic fishes trawled in the Chukchi Sea and Bering Strait, August 2004. *Northwestern Naturalist*. 88:168-187.

Recent work by Nahrung and Camus on polar cod may prove helpful in better understanding and describing responses to oil exposure: Nahrung, J., L. Camus, et al. (2010). "Biomarker responses in polar cod (*Boreogadus saida*) exposed to the water soluble fraction of crude oil." *Aquatic Toxicology* 97: 232-242.

Additionally, recent nearshore and intertidal research has been conducted in limited locations near Barrow (see <http://alaskafisheries.noaa.gov/habitat/fishatlas/default.htm>)

Socioeconomic Concerns

The Draft DEIS contains a good overview of the cultural and economic value of subsistence and would benefit from including the nutritional contribution to subsistence-reliant communities. Within the Subsistence Harvest Patterns section, the analysis uses colloquialisms to describe measures and terms. While this increases the readability of the document, the meanings of some of the terms are ambiguous. For example, "hunting effort" is used as a measure of resource importance with no description of what constituted this effort; and the bowhead whale is identified as "of primary importance," with no basis for this ranking. Finally, Latin binomials for species would provide clarification to local terms for hunted animals.

The Subsistence-Harvest Patterns section does not address the concern of bioaccumulation of contaminants. We believe that this important topic should be addressed in either this section, or in the cumulative effects section given the relevance and potential human health effects of long term exposure. Contaminant releases into the water are discussed elsewhere along with water quality standards; however it is known that water quality standards based on seafood consumption in the average American diet are not adequate for assessing exposure risks in tribal

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communities where seafood consumption may be a magnitude of order greater than that used in the models.

Finally, the statement on Page 101, "Because of the nearly homogeneous Inupiat population, it is not possible to identify a 'reference' or 'control' group within the potentially affected geographic area (for purposes of analytical comparison) to determine if the Inupiat are affected disproportionately" is a questionable interpretation of the Environmental Justice Executive Order that would negate a large proportion of Environmental Justice Analyses conducted to date.

Additional Comments

The Draft SEIS does not analyze the potential introduction of marine invasive species under the Cumulative Impacts section. Few industrial activities occur in the CSPA currently. The risk of invasive species being introduced from drilling equipment, ballast water of large tankers, etc. would increase with OCS development in these areas.

The Draft SEIS does not examine the effects of natural gas development and production on any unique habitat areas, such as Hanna Shoal, which are present in the lease sale area. It is important for other agencies and the public to understand what special areas may be present, how they function in the ecosystem, and how they may be impacted.

Oil spill clean-up in the broken ice and open water conditions that characterize Arctic waters is problematic. BOEMRE acknowledges that the larger deferral area would allow more time to respond to any potential oil spills before they reach the bowhead spring-migratory route and sensitive coastal resources. The greater distance would also potentially allow for increased weathering of oil before it reaches these areas. Given the difficult and unique challenges in responding to potential spills in the Arctic environment, these factors could be vital during a response and should factor heavily in BOEMRE's examination of alternatives for this sale.

Conclusion

As BOEMRE notes under the Summary of Impacts for Alternative III, the greatest net ecological benefits to EFH would accrue from this alternative because it contains the largest deferral area. Alternative III also offers a larger migration corridor for marine resources, including those that are important to subsistence activities. BOEMRE recognizes in the Summary of Environmental Impacts that "...any differences in the potential environmental impacts associated with the gas development and production under each action alternative analyzed are directly traceable to the size and location of proposed deferrals". Alternative III would protect nearshore marine resources and reduces the potential for a catastrophic event to impact benthic habitats, migratory current corridors, and nearshore estuarine habitats. It would also increase the distance between sensitive nearshore areas and any discharges, emissions, and noise associated with drilling and platform installation and operations.

BOEMRE's online graphic (http://www.alaska.boemre.gov/Maps/Sale_193_leases_issued.pdf) depicts the areas leased as a result of Sale 193. Although the Draft SEIS does not examine the issue of how many leases have already been issued within Corridor I, the graphic does not show

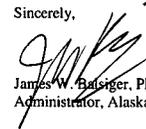
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many leased tracts within the 60 mile buffer zone. From this graphic, it appears that most industry interest (with a few exceptions) lies well offshore and outside of Corridor I.

NMFS recommends that BOEMRE modify Lease Sale 193 and adopt Alternative III (Corridor I Deferral) given that the larger corridor offers a precautionary approach to afford protection of marine resources in a data limited environment.

Should you have any questions, please contact LT Amy Cox by email at amy.b.cox@noaa.gov or by telephone at (907) 271-6620.

Sincerely,


James W. Balsiger, Ph.D.
Administrator, Alaska Region

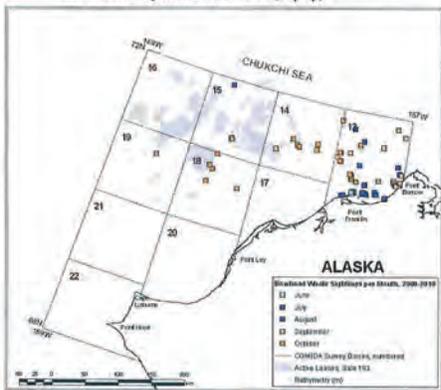
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Page numbers in square brackets refer to those in the Draft SEIS.

I. Misinterpretation or omission of existing scientific references that, when corrected, do not affect conclusions of the Draft SEIS.

- A. [p. 27, and similar comment on p. 30] "Because fall migrating bowhead whales are not expected to use the deferred area, fall bowhead encounters with oil and gas-related industrial noise and oil spills would be the same as for Alternative I (Proposed Action)."
- The 2008-2010 BOEMRE-sponsored COMIDA (Chukchi Offshore Monitoring in Drilling Area) marine mammal aerial surveys have in fact observed bowhead whales migrating within the deferred area during the fall. The following figure is from OCS Study BOEMRE 2011-06 (in prep):



Bowhead whale sightings per month, on- and off-effort, 2008-2010 combined.

B. [p.40] "Bowhead whales are unique in their ecology and their obligate use of lead systems to transit to summering grounds in the Canadian Beaufort Sea..."

- Due to recent satellite tagging studies, this is now known to be false. The following excerpt came from p. 54 of Quakenbush et al. 2010 (OCS Study BOEMRE 2010-033):

"Sea ice is generally assumed to limit the distribution of bowhead whales. However, even though the Beaufort Sea has virtually 100% ice cover when bowhead whales migrate through in the spring, ice does not seem to limit the movements of tagged whales between Barrow and Amundsen Gulf (e.g., Fig. 23). There must be enough openings and thin ice to allow whales to travel straight from Barrow to Amundsen Gulf without lingering and waiting for leads to open. Likewise, sea ice within the Bering Sea does not seem to limit the movements of tagged whales.

"Bowhead whales wintering in the Bering Sea were believed to be restricted to polynas or the ice edge (Ainana et al. 1997, Brueggeman 1982). We found that whales used areas with 100% ice cover, even when polynas were available (Figs. 17 and 18). However, land-fast ice does seem to limit the distribution of bowhead whales. For example, in the spring of 2009, six bowheads migrated to Amundsen Gulf, which was filled with land-fast ice. The whales remained at the ice edge until the gulf cleared of land-fast ice (Fig. 24).

- However, this does not discount the importance of the coastal region in the northeastern Chukchi Sea to bowheads during the spring migration, as Quakenbush et al. (2010) state on p. 29: "Bowhead whales traveled mostly parallel and within 40 km of the Alaskan coast during the spring migration."

- Quakenbush et al (2010) state on p. 53 that they suggest that this variability in the width of the bowhead migratory corridors is "linked to variability in forage conditions."

C. [p. 40] "In many years, large numbers of bowheads have been observed feeding in the western Chukchi Sea."

- It should be added that the northeastern Chukchi Sea is a foraging area for some bowheads during some years. The following excerpt and figure are from Clarke and Ferguson (2010)²
"Most bowhead whales were recorded as engaged in directional swimming (59%). Feeding behavior was rarely recorded on-effort and is likely underrepresented in the database due to the difficulty of identifying this behavior in the brief periods of time allowed during transects. Bowhead whale feeding behavior was recorded off-effort (while on search or circling) in two years during this study, under very different circumstances. In 1983, a heavy ice year, nine bowheads were observed feeding on 17 and 18 October (Figure 5) in 70-80% ice cover. In 2009, a light ice year, bowhead whales were observed feeding from 30 June to 11 July near Pt Franklin, and at least one easily re-identifiable whale was present during this 13-day period. Ice cover at this time ranged from 5% to 80%. A group of at least 12 bowheads was also observed feeding southwest of Pt Barrow on 19 September 2009 when no ice was present."

² Clarke, J.T. and M.C. Ferguson. Large whale aerial surveys in the northeastern Chukchi Sea, 2008-2009, with review of 1982-1991 data. Paper SC/62/BRG13 presented to the IWC Scientific Committee, June 2010 (Unpublished).

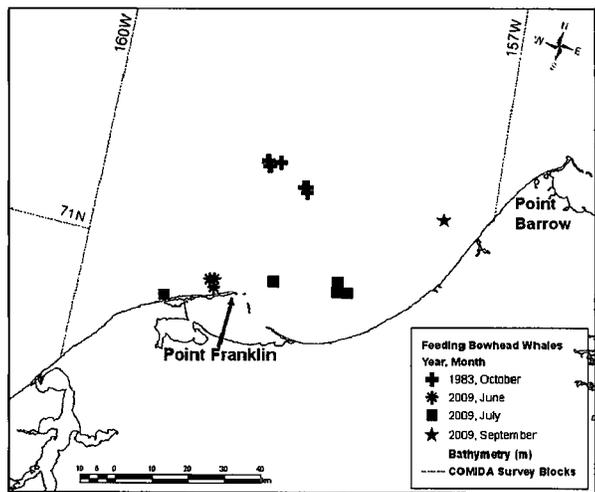


Figure caption from Clarke and Ferguson (2010): "Locations of on- and off-effort feeding bowhead whales, 1983 and 2009."

D. [p. 51] "The northeastern-most recurring known gray whale feeding area is in the Chukchi Sea southwest of Barrow (Clarke, Moore, and Ljungblad, 1989). Gray whale feeding habits in the northern Chukchi Sea appear limited to shoal and coastal waters and their selection of shoal and coastal habitat is greatest in the summer (Moore et al., 2000). Shallow coastal areas and offshore shoals provide habitat rich in gray whale prey."

- The first sentence is a misrepresentation of the findings in Clarke et al. 1989. Clarke et al. 1989 noted gray whales feeding off Hanna Shoal, which is located at the northern boundary of the CSPA.
- The last sentence is not accurate, based on COMIDA marine mammal aerial surveys conducted in 2008, 2009, and 2010. The following quote was taken from OCS Study BOEMRE 2011-06, which is the final report for the COMIDA marine mammal aerial surveys conducted in the CSPA from 2008-2010:
"The relative lack of gray whale sightings (and mud plumes, which are indicative of the presence of feeding gray whales) offshore was markedly different from that documented during surveys conducted from 1982-

1991, when gray whales were frequently seen on Hanna Shoal (Moore and Clarke, 1992²)."

- Taken together, we think it is more appropriate to say that gray whales are known to feed in offshore shoals at least as far north and west as Hanna Shoal (located at the northern end of the CSPA) in the time period from 1982-1991; however, recent aerial surveys have found an apparent shift in distribution, with no gray whales seen in the offshore shoals in 2008, 2009, and 2010.

E. The following two instances refer to minimal survey altitudes in order to minimize disturbance to walrus:

- [p. 88] "Researchers conducting aerial surveys for walrus in sea-ice habitats have reported little reaction to aircraft above 1,500 ft (457 m), meaning that BOEM's minimum altitude requirements would preclude adverse impacts to walrus, to the extent that human safety considerations permit flying at this altitude."
- [p. 96] "Researchers conducting aerial surveys for walrus in sea ice habitats have reported little reaction to aircraft above 1,000 ft (305 m)."

However, the 2010 Annual Report to BOEMRE for the COMIDA marine mammal aerial survey project stated the following:

"In early August, walrus were distributed throughout the survey area north of latitude 71°N, both in the water and hauled out on the few remaining scattered ice floes. In late August, most walrus were very near shore between Pt. Lay and Barrow, Alaska. On 30 August, several large walrus haulouts on the coast were documented by the COMIDA team. Walrus were observed at three haulouts located 22 miles east of Cape Lisburne, comprising an estimated 2,500, 1,000 and 200 animals each (Figure 9). These haulouts were on narrow beaches along rocky cliff faces. Despite the aircraft maintaining a survey altitude of 1,500 ft and avoiding direct overflight of the animals, walrus in the smallest aggregation seemed to respond to the aircraft by flushing into the water."

The COMIDA surveys found that the reaction of hauled out walrus to the survey aircraft depended on the following factors: 1) whether the aircraft passed by the haulout over water or over land; and 2) the terrain near the haulout, with evidence that a stronger response was solicited from animals in haulouts near cliffs compared to those along open coastlines. Therefore, we believe this issue of a minimum altitude for aircraft in the vicinity of walrus to fly without causing disturbance should be given more attention.

II. Misinterpretation or omission of existing scientific references that, when corrected, could affect conclusions of the Draft SEIS.

A. Expected effectiveness of mitigation measures for marine mammals

- [p. 20; similar statement made on p. 110] "While the complexity of how marine mammal species react to underwater and above water sound renders an exact determination of potential adverse impacts difficult, abundant regulatory review and careful design of mitigation measures are expected to preclude instances of level A, or "harm" take of marine mammals and to reduce the potential for level B or "harassment" take."
 - What reference supports the claim that the proposed mitigation measures are effective in reducing the potential for level B harassment? BOEMRE should substitute the term "injury" for "harm" as the latter term is not

² Moore, SE and JT Clarke. 1992. Distribution, abundance and behavior of endangered whales in the Alaskan Chukchi and western Beaufort Seas, 1991: with a review 1982-91. Prepared for Minerals Management Service, OCS Study MMS 92-0029.

contained in the Marine Mammal Protection Act. Likewise, when referring to "Level B" take, we suggest you state "Level B or 'behavioral harassment' take".

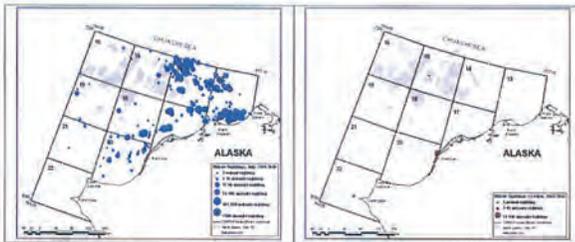
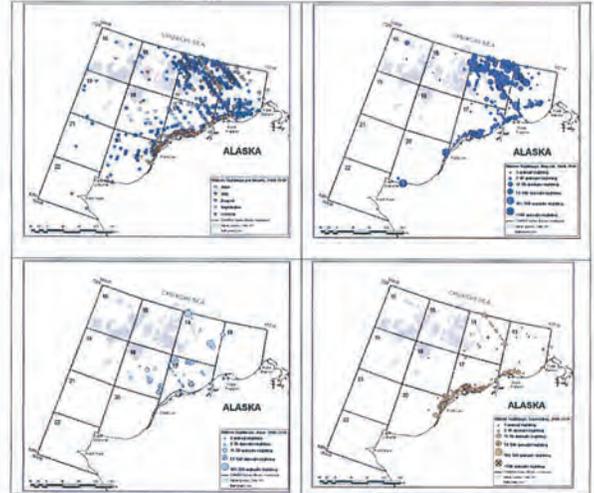
- The report entitled, "Expert Panel Review of Monitoring and Mitigation Protocols in Applications for Incidental Take Authorizations Related to Oil and Gas Exploration, Including Seismic Surveys, in the Chukchi and Beaufort Seas,"³ which was written in 2010 by the peer-review panel that NMFS Office of Protected Resources convened to review all IHA applications for 2010, discussed weaknesses in existing mitigation and monitoring methods for marine mammals. In light of the peer-review panel's report, we recommend that BOEMRE include additional explanation to support its contention that the mitigation measures critiqued by the panel are effective.
- B. [p. 30] "The primary benefit of this corridor is that it would move sources of potential adverse effects further away from important coastal habitats. The increased distance between offshore development and coastal habitats also could slightly decrease the percent chance of spilled oil contacting marine mammals, increase weathering of spilled oil prior to contact coastal habitats, and increase available spill-response time."
- True only for coastal habitats. Polar bears, walrus, and ice seals prefer sea ice habitats, which are located offshore. Alternatives III (Corridor I deferral) and IV (Corridor II deferral) provide no additional protection to marine mammals associated with sea ice habitats.
- C. [p. 31] "Because potential launch points for oil spills would move seaward, time for spilled oil to weather and time to mount an oil-spill response would be increased. Consequently, the effects on subsistence-harvest patterns would be expected to be reduced."
- This is true only for landfast or shorefast ice-based hunts. Need to contact North Slope Borough or the Alaska Eskimo Whaling Commission to find out how far offshore bowheads are hunted. The bowhead hunt might occur within the boundaries of the regions in which drilling is permitted under Alternatives III and IV.
- D. [p. 48] "Walrus rely on sea ice as a substrate for resting and giving birth (Angliss and Outlaw, 2005) and generally require ice thicknesses of 50 cm or more to support their weight (Fay, 1982). When suitable pack ice is not available, walrus will haul out on land, preferring sites sheltered from wind and surf. Traditional haulout sites in the eastern Chukchi Sea include Cape Thompson, Cape Lisburne, Icy Cape, and the barrier islands off of Kasegaluk Lagoon. In low ice years, when the pack ice retreats northward of the continental shelf, walrus come ashore to rest and remain near foraging areas. By August, depending on the retreat of the pack ice, walrus are found farther offshore, with principal concentrations to the northwest of Barrow. As the pack ice advances at the

³ <http://www.nmfs.noaa.gov/pr/pdfs/permits/openwater/panel2010.pdf>

end of the summer open-water season, large herds begin moving back down to the Bering Sea."

- This information on coastal walrus haulouts is outdated and missing significant changes in walrus behavior in the northeastern Chukchi Sea over the past few years. The following excerpt and figures are from OCS Study BOEMRE 2011-06, which is the final report for the COMIDA marine mammal aerial surveys conducted in the CSPA from 2008-2010. Note, in particular, the large numbers of walrus hauled out on land in August and September in the figures below:

"Walrus were seen every month except November (Figure 14; Table 1). Distribution was associated with sea ice coverage in June through early August, and shifted to nearshore habitat, both in the water and in coastal haulouts, in late August and September. Few walrus were seen in the study area in October of any year. Coastal haulouts were not reported in 2008, when sea ice remained in the COMIDA study area throughout summer and autumn (NSIDC, 2008). Haulouts were reported in autumn 2009 (Appendix 2) and 2010 (Appendix 3) when sea ice retreated far offshore."



E. [p. 110] "Available data indicates that noise and disturbance from oil and gas exploration and development activities since the mid-1970's have had localized, short-term adverse effects and no lasting population-level adverse effect on bowhead whales. There is no indication that human activities (other than historic commercial whaling) have caused long-term displacement in bowheads."

- A statement like this should be supported with references. Specifically, what data? What methods were used to analyze the data?
- This excerpt seems to contradict the following statement from the Final EIS for Lease Sale 193 (p. V-20 in OCS EIS/EA MMS 2007-026):
"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas-related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead whale] behavior from such activities in either evaluation area."
- The quote from p. V-20 of the FEIS is a more accurate representation of the scientific evidence.
- The previously-mentioned 2010 report⁴ from the NMFS Office of Protected Resources peer-review panel acknowledged this lack of information, and recommended that industry should "accommodate specific requests for raw data, including tracks of all vessels associated with the operation and activity logs documenting when and what types of sounds are introduced into the environment by the operation."

⁴ <http://www.nmfs.noaa.gov/pr/pdfs/permits/openwater/panel2010.pdf>

Tribal Governments and Alaska Native Organizations



Alaska Eskimo Whaling Commission

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November 29, 2010

Via Electronic Mail

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BOEMREREAKPublicCommen@BOEMRE.gov

**Re: Comments on the Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Draft Supplemental Environmental Impact Statement (75 Fed. Reg. 63504
(Oct. 15, 2010)).**

Dear Mr. LaBelle,

Thank you for the opportunity to provide input on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) Supplemental Draft Environmental Impact Statement (SDEIS) for Lease Sale 193. These comments are submitted on behalf of the Alaska Eskimo Whaling Commission (AEWC). The AEWC represents the eleven bowhead whale subsistence hunting villages of Barrow, Nuiqsut, Kaktovik, Point Hope, Wainwright, Kivalina, Wales, Savoonga, Gambell, Little Diomedé, and Point Lay. Our villages rely on the living resources of the Beaufort and Chukchi Seas for the majority of our food and for the continuation of our subsistence society and culture.

The AEWC was formed by the whaling captains of our constituent villages in 1980, for the purpose of protecting our bowhead whale resource and subsistence hunt. We carry out our responsibilities through locally-delegated tribal authority and through federal authority delegated pursuant to the NOAA-AEWC Cooperative Agreement. Alaskan Native subsistence takes of marine mammals are exempt from the Marine Mammal Protection Act's (MMPA) moratorium on the take of marine mammals. MMPA 101 (b). In addition, Congress has given our subsistence livelihood priority over other uses of the marine environment, requiring that other users mitigate the impacts of any activities with the potential to adversely affect the availability of our subsistence resources. Our communities potentially face very significant impacts from oil and gas exploration and development in the Chukchi Sea. Therefore, the AEWC must insist that

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Alaska Eskimo Whaling Commission Comment

the proposed action. 40 C.F.R. § 1502.9(c)(1). Here BOEMRE has significant new information regarding bowhead whale migratory patterns in the Chukchi Sea and oil spills and well blowouts that was not disclosed or analyzed in the SDEIS.

Significant New Information About Bowhead Whale Use Of The Chukchi Was Not Included In The SDEIS. In its rush to justify why further information is not necessary for a reasoned decision, BOEMRE skipped over new and incredibly relevant information regarding bowhead whale use of the Chukchi Sea. This new information includes: ADPFG, et al. Satellite Tracking of Western Arctic Bowhead Whales (July 2010) (DOI/BOEMRE is listed as the funding agency); Quakenbush, et al. Fall and Winter Movements of Bowhead Whales in the Chukchi Sea (2009); and NMFS's July 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas. According to these scientific studies *almost every single bowhead whale in the Western Stock passes through the proposed lease sale area during the fall migration.*

This information was not known when the original EIS was prepared for Lease Sale 193. BOEMRE now has significant new information about how bowhead whales use the lease sale area. Nevertheless, the agency failed to disclose and analyze the impacts to bowhead whales in light of this information. As a result, BOEMRE must prepare another NEPA document that takes a hard look at bowhead whale use of the lease sale area and considers new alternatives based on the extensive use of the lease sale area by bowhead whales during the fall migration. AEWC asks that BOEMRE provide for public comment on that analysis before deciding whether to move forward with the lease sale.

Significant New Information From The Deepwater Horizon Catastrophe Was Not Included In The NEPA Process. The on-going catastrophic in the Gulf of Mexico as a result of the Deepwater Horizon blowout has yielded significant new information and circumstances that are relevant to Lease Sale 193. The Council on Environmental Quality has stated that "[t]o the extent that the effects of a catastrophic spill have been projected or modeled, that analysis would have to be compared to the effects of this spill to provide current information to the decisionmaker."¹ CEQ Report Regarding the Minerals Management Service's National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development at 34 (August 16, 2010).¹ Nevertheless, BOEMRE has not considered this information and new circumstances in its supplemental analysis.

The Range Of Alternatives In The SDEIS Is Unreasonable. The new information pertaining to bowhead whale use of the proposed lease sale area and of the inadequacies of BOEMRE's previous oil spill analyses requires the development of new alternatives. Currently, as BOEMRE acknowledges, all the alternatives would result in similar environmental impacts. Therefore, it is clear by the agency's admissions that it has failed to present a reasonable range of alternatives. At the least, BOEMRE needs to consider alternatives that put in place time and area restrictions to protect migrating bowhead whales.

¹ Available at: <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf>

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BOEMRE undertake careful review and thorough analysis of potential impacts from the proposed lease sale, and that the agency ensure that all impacts with the potential to affect the availability of our subsistence resources be mitigated properly under the terms of the MMPA.

On remand, the District Court of Alaska has instructed the agency (1) to disclose potentially relevant scientific information not available during the NEPA review and to analyze whether that information could be necessary for the lease sale decision, and (2) to analyze the impacts of natural gas development in the lease sale area. Unfortunately, in the resulting SDEIS, BOEMRE offers an empty exercise designed to address the letter but not the intent of the court order. Similarly, and inexplicably, the agency ignores its own research providing important new information about bowhead whale use of the lease sale area. Specifically, a five-year report on a bowhead whale satellite tagging study funded by BOEMRE was published in July 2010, two months before the SDEIS was finalized. Virtually every whale tagged during the five-year period migrated through the lease sale area; some whales moved through the area multiple times in a season. The information from this study was available to BOEMRE throughout its review for the SDEIS; it was updated regularly on the study's website prior to publication of the study; and it is important to the lease sale decision, certainly from the perspective of the agency's analysis of marine mammal impacts. Yet there is no mention of this work at all in the SDEIS.

In addition to the above, the AEWC would like to bring to your attention the fact that the SDEIS continues the MMS's practice of assuming that our villages could sustain up to two years of a potentially serious reduction in food supply without experiencing a significant impact from development.

Finally, BOEMRE, continuing the practice of MMS, supports its recommended alternative by asserting that impacts to our subsistence livelihood will be addressed through "conflict avoidance measures." Yet BOEMRE also continues MMS's practice of not requiring that lessees adhere to the Open Water Season Conflict Avoidance Agreement, which specifies negotiated and reasonable

It is the AEWC's sincere hope that during the current Administration we might see greater integrity and a higher quality of work from your agency. Unfortunately, this hope is not realized in the SDEIS.

I. SUMMARY OF THE COMMENTS

The Remand Order And NEPA Were Not Complied With. As an initial matter, BOEMRE missed the point of the remand and of the National Environmental Policy Act (NEPA) in the SDEIS. The pages and pages of nothing in the SDEIS do nothing to address our concerns about impacts to subsistence resources and missing information and certainly, they fail to provide the analysis required by NEPA and the Council on Environmental Quality (CEQ)'s regulations.

BOEMRE Has An Independent Duty To Analyze Significant New Information And Circumstances And Has Failed To Carry Out That Duty. NEPA requires the preparation of a supplemental EIS when significant new circumstances or information emerges that is relevant to

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The Significance Thresholds Are Unlawful. The threshold BOEMRE is using to define a significant impact fails to comport with NEPA. The SDEIS includes a plethora of impacts to natural and subsistence resources, including the harm to cetaceans from noise and potential oil spills that the agency concludes do not warrant concern. For example, the agency discusses several potentially serious impacts to whales from noise, pipelines, and oil spills. *See e.g., SDEIS at 79-80.* Serious impacts to whales could be devastating to our communities who rely on whales for our survival, yet the agency concludes that there will be no "major adverse impacts" to Alaskan natives. SDEIS at 103.

Moreover, the agency makes unrealistic assumptions about how Inupiat can mitigate these potentially significant impacts without actually explaining how these mitigation measures would be possible. For example, the agency assumes that if subsistence resources become unavailable, our communities can simply turn to store-bought foods. SDEIS at 101 (explaining the metabolic effects and other health problems that would result from replacing a subsistence diet with Western foods). But the agency's assumption not only disregards the social and cultural dependence of our communities on subsistence hunting -- especially whaling -- it fails to take account of the fact that the majority of our families do not have the income to afford store-bought foods, which are extremely expensive and not always available in our villages.

Another NEPA Analysis Is Required. A new NEPA process is necessary to: comply with the terms of the remand order and 40 C.F.R. § 1502.22(b); analyze significant new circumstances and information pertaining to bowhead whale use of the Chukchi Sea and oil spills in the U.S. OCS; develop a reasonable range of alternatives; and to analyze the significance of the impacts of the lease sale in a manner that comports with NEPA. The public must be afforded notice of this NEPA process and the opportunity to comment on BOEMRE's analysis. In re-analyzing the environmental impacts, the agency must not merely go through the motions of the NEPA process to reach a pre-determined result, as it seems to have done here. Rather, a new process is necessary that truly enables BOEMRE to make a well-informed decision and how to hold a lease sale in the Chukchi.

II. THE REMAND ORDER AND NEPA WERE NOT COMPLIED WITH BY BOEMRE.

A. BOEMRE Has Failed To Comply With The Remand Order.

BOEMRE has failed to fully and meaningfully comply with the District Court of Alaska's order to correct flaws in the FEIS for Lease Sale 193 related to the missing and inadequate information. In *Native Village of Point Hope v. Salazar*, --- F.Supp.2d ---, 2010 WL 3083541 (D. Alaska 2010), the District Court of Alaska found that the FEIS included "dozens if not hundreds of entries indicating a lack of information about species/habitat, as well as a lack of information about effects of various activities on many species." *Id.* (emphasis added). Instead of appropriately identifying and addressing the missing information according to NEPA's requirements, the court found that the agency had acted arbitrarily by ignoring the procedures required by 40 C.F.R. § 1502.22 and ordered the agency to comply with the regulation on remand.

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Section 1502.22 requires that

[i]f the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained . . . the agency shall include within the environmental impact statement:

- (1) A statement that such information is incomplete or unavailable;
- (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
- (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
- (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

40 C.F.R. § 1502.22(b). To comply with this requirement in the SDEIS, BOEMRE established a three-part test for each piece of information that was missing from the original FEIS, asking whether the missing information is: 1) relevant to reasonably foreseeable significant adverse effects on the human environment; 2) essential to a reasoned choice among alternatives; and 3) obtainable. SDEIS Appendix A at 1-2. This test is fundamentally flawed because nowhere in section 1502.22(b) is a reasoned choice among alternatives the focus. Rather, the agency is to focus on the importance of the information to evaluating "reasonably foreseeable significant adverse impacts." 40 C.F.R. § 1502.22(b). Of course, these impacts should influence the decision maker's choice of alternatives, but that does not mean that BOEMRE can do what it has done: say that none of the missing information is essential to deciding among the alternatives.

Additionally, BOEMRE's test and the accompanying pages of missing information fail to provide the analysis required by sections 1502.22(b)(3) and (4). Nowhere does the SEIS provide a summary of the "existing credible science" or the agency's evaluation of impacts based on generally accepted methodologies. 40 C.F.R. § 1502.22(b).

It is astonishing that for the *hundreds* of pieces of missing information, the agency concluded that *not one piece of information* was essential for evaluating reasonably foreseeable impacts or to a reasoned choice among alternatives. SDEIS at 3; *id.* at 10 ("none" of the missing information was "essential for a reasoned choice among alternatives"). Yet the missing information relates to the presence and severity of the environmental impacts of Lease Sale 193, such as the existence of subsistence resources in the project area and the likelihood of a catastrophic oil spill. By providing broad-sweeping, conclusory, and unsupported statements that none of this information is essential to the decision-making process, BOEMRE fails to comply with the requirements of section 1502.22. See *Mayo Found. v. STB*, 472 F.3d 545, 555-556 (8th Cir. 2006) (explaining what the agency had to do to comply with section 1502.22).

The agency provided five overarching reasons for its conclusion that none of the missing information is essential to a reasoned choice among alternatives:

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the severity of potential impacts would be nearly identical under any action alternative; therefore, very specific types of information relevant to species, particular life history traits, or behavior do not help substantially in distinguishing among alternatives.

SDEIS App. A at 3. This conclusion ignores the fact that BOEMRE can and should develop a new range of alternatives based on the information it has acquired since the first round of NEPA on the proposed lease sale. If all the alternatives have the same environmental consequences, then BOEMRE has failed to present a reasonable range of alternatives in the SDEIS. *Veneman*, 313 F.3d at 1120 (discussing NEPA's requirement that an agency "[r]igorously explore[] and objectively evaluate[] all reasonable alternatives" to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public" (citing 40 C.F.R. § 1502.14)).

This conclusion also ignores the differences in localized effects that are likely to result between the alternatives (that provide for different buffer areas) and the no-action alternative (under which no action would take place). For example, the Proposed Action and Alternative III provide different sized buffer zones, which could alter the severity of an oil spill or other potential impacts. The missing information would shed light on these differences, such as the location of subsistence resources in the buffer zones because it is essential to make an informed and reasoned choice between these alternatives.

Fourth, BOEMRE cannot rely on the other environmental laws to avoid assessing the environmental impacts in this NEPA process. Clean Water or Clean Air Act permits, or other non-NEPA documents cannot "satisfy a federal agency's obligations under NEPA." *S. Fork Band Council of W. Shoshone of Nevada v. U.S. Dept. of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (internal citations omitted); *Mayo Found. v. STB*, 472 F.3d 545, 555 (8th Cir. 2006) (quoting *Mid States Coalition for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 550 (8th Cir. 2003)) (finding "fault with the FEIS conclusion that further study of this issue was not warranted because the 1990 Clean Air Act Amendments placed caps on sulfur dioxide emissions"); *League of Wilderness Defenders-Blue Mountains Biodiversity Project v. U.S. Forest Service*, 549 F.3d 1211, 1219 (9th Cir. 2008) (rejecting agency's attempt to tie to a non-NEPA document). Yet here the agency relies on compliance with other environmental laws to excuse its failure to obtain missing information. The agency provides the following example to support this decision:

comprehensive regulatory standards under the Clean Air Act are sufficient to preclude air quality impacts from reaching a level of significance. Incomplete information regarding air quality issues is in this sense less useful to the decision maker, who is assured that no matter which alternative he or she selects, significant adverse effects to air quality will be avoided.

SDEIS Appendix A at 3. This conclusion ignores and undermines NEPA's purpose of independent disclosure and analysis of environmental impacts. Regardless of whether the Clean Air Act process, or other similar environmental laws, will mitigate environmental impacts, the agency is still required to identify these in the NEPA process.

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- 1) The availability of sufficient information to support sound scientific judgments and reasoned managerial decisions, even without the identified incomplete or unavailable information.
- 2) The presumption that adverse effects would certainly occur under the specific circumstances to which the incomplete information applies.
- 3) The commonality of potential impacts amongst all action alternatives, which lessened the utility of incomplete information to the decision-maker.
- 4) The existence of other environmental laws and regulations that would preclude significant adverse effects on particular resources.
- 5) The understanding that certain items of presently missing or incomplete information will be known (and utilized to avoid or minimize adverse impacts) at a later stage of OCS Lands Act environmental review.

Id. at 3-4. These reasons fail to justify the lack of critical information about the impacts of the lease sale as require by section 1502.22.

First, the agency's conclusion that the existing information is sufficient to make a reasoned decision is contrary to the evidence in the record. There is too little information about the impacts from oil and gas exploration activities on whales to make an *informed* decision to authorize this lease sale. For example, the agency admits that "there is uncertainty about effects on cetaceans in the event of a large spill," but concludes that this information is not necessary to make a reasoned decision. SDEIS, App. A at 1. This conclusion shows that no matter what the impact to the whales, including complete extirpation of the species, the agency would still authorize this lease sale. This ill-informed decision-making is what NEPA is designed to avoid by assuring that a full analysis is prepared before "resources have been committed or the die otherwise cast." *Methow Valley*, 490 U.S. at 349.

Second, BOEMRE cannot rely on the presumption that adverse effects will occur to meet the obligations of section 1502.22. Again, the agency's discussion of adverse impacts must include a "summary of existing credible scientific evidence" that is relevant to the impacts and the "agency's evaluation of such impacts" based on accepted methods. 40 C.F.R. § 1502.22(b)(3)-(4). Nor can BOEMRE rely on this presumption to avoid its duties to disclose and explain the environmental impacts. In fact, this reasoning is contrary to NEPA's dual goals of insuring that 1) that the agency has *carefully and fully* contemplated the environmental effects of its action and 2) that the public has sufficient information to challenge the agency." *Robertson*, 490 U.S. at 349; 40 C.F.R. § 1500.1(b). To comply with these goals, NEPA requires the agency to determine what those impacts will be and describe them in the appropriate document, regardless of whether the agency already knows they will be significant or adverse. By presuming that no amount of information about the severity of the impacts could change the agency's decision among alternatives, BOEMRE is admitting that its mind is already made up about Lease Sale 193.

Third, BOEMRE's conclusion about the commonality of the impacts between alternatives ignores the import of the alternatives analysis, which the NEPA regulations describe the "as the 'heart' of the EIS." *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1120 (9th Cir. 2002). For example, the agency has stated that

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Fifth, BOEMRE's conclusion that information "will be known . . . at a later stage of OCS Lands Act environmental review" is contrary to the language of section 1502.22. Either the information "cannot be obtained" because it is too costly to obtain or "the means to obtain it are not known" in which case the agency must follow the procedure laid out in section 1502.22(b). Alternatively, the information can be obtained in which case the procedure in section 1502.22(a) should be followed. Justifying missing information by saying it will be known later is simply not adequate, especially here where the agency has already received at least one proposed exploration plan for a lease block in the sale area and several "ancillary activity" proposals, and can readily identify and extrapolate impacts from these proposals. Activities such as seismic surveying, which occur before any later stages in the OCSLA process, can have significant impacts on bowhead whales and other marine mammals so it is imperative that the agency use the available information at this stage to take the "hard look" required by NEPA.

Despite the agency's astonishing conclusion to the contrary, much of the missing information is essential to assessing the environmental impacts of the lease sale, establishing a reasonable range of alternatives to deal with those impacts, and making a decision among the alternatives for Lease Sale 193. For example, the missing information related to the effects of noise and oil spills on whales is imperative to properly assessing the impacts to our subsistence resources and communities. See, e.g., SDEIS App. A at 1 (acknowledging the uncertainty about the impact of an oil spill on whales). By learning about the extent of these impacts, the agency can determine which alternative allows the agency to meet NEPA's policy "to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. § 1500.2.

By failing to obtain the hundreds of pieces of missing information, BOEMRE is undermining NEPA's emphasis on "the importance of *coherent and comprehensive up-front* environmental analysis to ensure informed decision making to the end that 'the agency will not act on incomplete information, only to regret its decision after it is too late to correct.'" *Churchill County v. Norton*, 276 F.3d 1060, 1072-73 (9th Cir. 2001) *opinion amended on denial of reh'g*, 282 F.3d 1055 (9th Cir. 2002) (emphasis added).

B. BOEMRE Has An Independent Obligation Under NEPA To Consider The New Information And Circumstances That Have Arisen Since The FEIS Was Prepared.

BOEMRE cannot rely on the narrow scope of the remand to exclude new information and circumstances arising since the FEIS for Lease Sale 193 was prepared. Even if the District Court of Alaska had not remanded the FEIS, the agency would still need to conduct a supplemental EIS to address the new information that has come to light about bowhead whales and oil spills.

NEPA requires an agency to prepare a supplemental EIS when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(ii). When new information related to an EIS comes to light, the agency must take a "hard look" at whether the new information is significant to the environmental impact analysis. *N. Idaho Cmty. Action Network v. United*

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States DOT, 545 F.3d 1147, 1154-1155 (9th Cir. 2008) (citing *Price Road Neighborhood Ass'n v. U.S. Dep't of Transp.*, 113 F.3d 1505, 1510 (9th Cir. 1997)). If the new information may give rise to significant environmental impacts "in a manner not previously evaluated and considered," the agency must conduct an SEIS. *Id.* at 1157.

NEPA also requires that an agency use "high-quality information and accurate scientific analysis. 40 C.F.R. § 1500.1(b); *Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005). An agency cannot rely on "outdated data" or fail "to acknowledge the limitations in a methodology." *Nw. Ecosystem Alliance v. Rep.*, 380 F. Supp. 2d 1175, 1195 (W.D. Wash. 2005).

I. The SDEIS must include current scientific information about bowhead whale use of the proposed Lease Sale area.

AFCWC is concerned about the impacts of the proposed Lease Sale on bowhead whales and other subsistence resources. Bowhead whales are "critical to the nutritional and cultural health of indigenous people of Alaska, Russia, and Canada for at least the last 2000 years." Quakenbush at 1. As pressure for oil and gas development have increased in the Chukchi Sea, one of the historic locations of our subsistence whaling hunts, we have repeatedly emphasized that there is a serious lack of scientific information on the baseline conditions of this area and the impacts of exploration on the environment and these whales. Despite this serious lack of information, the agency has proceeded to auction lease blocks and approve exploration plans in the area.

BOEMRE has chosen to ignore new scientific information about bowhead whales in the Chukchi Sea that was previously unknown. This includes: ADFG, et al. Satellite Tracking of Western Arctic Bowhead Whales (July 2010) (DOI/BOEMRE is listed as the funding agency); Quakenbush, et al. Fall and Winter Movements of Bowhead Whales in the Chukchi Sea (2009); and NMFS's July 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas. All of this research acknowledges that a majority of bowhead whales in the Western Arctic stock migrate through the Lease Sale 193 area. BiOp at 19; ADFG Report at 54. Yet, BOEMRE has failed to include this information in the SDEIS.

This failure is critical. For example, the SDEIS concludes that "[p]rolonged exposure to freshly spilled oil could cause adult whale mortalities" but that "number would be small." SDEIS at 19. This conclusion is undermined by the new scientific information on bowhead whales, which shows a far more extensive use of the Lease Sale 193 area than previously expected.

The ADFG study monitored the annual distribution of these whales, including in summering and wintering locations and throughout migration, and described how these whales move throughout the Lease Sale 193. ADFG Report at 1. The report describes where and when certain tagged bowheads migrated through the Lease Sale 193 area, suggesting the times at which the potential for disturbances are greatest. ADFG Report at 54-55. For example, the report found it was likely that all tagged whales migrated through some portion of the lease area. *Id.* Despite this information, the report recommended that additional information is needed on the migration and feeding habits of bowhead whales. *Id.* at 58. While BOEMRE

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helped fund this research, it fails to acknowledge it (let alone analyze it) in the SDEIS. The Quakenbush report reaches similar conclusions.

Additionally, NMFS's 2010 BiOp on small takes of marine mammals by the oil and gas industry updates and synthesizes some of the information about baseline environmental conditions and discusses the potential impacts to marine mammals, including bowhead whales. The BiOp concludes that the oil and gas activities are "likely to adversely affect these whales due to vessel operations, noise from marine geophysical (seismic) exploration, and aircraft traffic." BiOp at 79. Despite the relevance of this information to the analysis in the SEIS, BOEMRE does not address the BiOp or discuss whether it provides additional information that results in a substantial change to the previous analysis or is essential to a reasoned decision. Rather, the SEIS completely ignores NMFS's data and conclusions.

The Quakenbush et al. report, and BOEMRE's bowhead whale studies have provided significant new information on bowhead whales in the Lease Sale 193 area. This information bears directly on the adequacy of the environmental analysis and conclusions in both the FEIS and the SDEIS. Because this information paints the environmental impacts in a light not previously considered, the agency must analyze this information to determine whether the locations of the bowhead whales change the severity of the environmental impacts. Now that the agency can identify the areas through which bowhead whales migrate, it must disclose this information to the public, analyze it, develop alternatives based on it and draw new conclusions regarding the significance of the impacts from the proposed lease sale.

BOEMRE has helped fund some of this research, undertaken some of it, and certainly is aware of it – yet it does not appear in the SDEIS. The telemetry research was even raised in litigation over BOEMRE's approval of Shell's exploration plan for the Chukchi Sea. Nevertheless, the agency ignored this information in the SDEIS. In sharp contrast, the SDEIS includes updated information on other species, including fin whales, humpback whales, and polar bears. SDEIS at 43 ("With respect to threatened and endangered species, the following new information was reviewed"). By failing to update the bowhead whale information, the agency has violated its duties under NEPA. *Native Ecosystems Council v. Tidwell*, 599 F.3d 926, 937-8 (9th Cir. 2010) (finding that the Forest Service violated NEPA by failing to supplement an EA when new information on potential habitat in the project area became available).

2. The new circumstances and information pertaining to oil spills and blowouts from the Gulf of Mexico require review in a SEIS.

BOEMRE cannot rely on the limited scope of the District Court of Alaska's remand to evade its ongoing duty to supplement the EIS with new information and analysis regarding the possibility of an oil spill and blowout in the U.S. OCS. NEPA imposes an independent obligation to supplement an EIS when significant new information or circumstances arise. 40 C.F.R. § 1502.9(c)(ii). The Deepwater Horizon oil spill constitutes new information and circumstances that are relevant to BOEMRE's analyses of oil and gas leasing in the Outer Continental Shelf. The catastrophe in the Gulf of Mexico raises substantial questions about the efficacy of BOEMRE's prior analysis of oil spills in the OCS.

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As previously discussed, NEPA requires additional environmental analyses when new information arises that paints "a seriously different picture of the environmental landscape such that another hard look is necessary." *Wisconsin v. Weinberger*, 745 F.2d 412, 418 (7th Cir. 1984). Taking this NEPA requirement into account, CEQ issued a report that addressed whether the new information stemming from the Deepwater Horizon Oil Spill requires BOEMRE to revisit its prior NEPA analysis regarding oil spills in the Outer Continental Shelf (OCS). CEQ Report Regarding the Minerals Management Service's National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (August 16, 2010) (hereafter CEQ Report). Specifically, the CEQ concluded that

[t]he BP Oil Spill constitutes significant new information and circumstances that may require reevaluation of some conclusions reached in prior NEPA reviews and other environmental analyses and studies. Specifically, conclusions may change about the likelihood, magnitude, and environmental impacts of a major spill in connection with OCS oil and gas drilling activities.

Id. at 32. The report went on to state "the fact and effects of the BP Oil Spill requires revisiting prior assessments of the risk of catastrophic spills and their probability analysis." *Id.* at 34.

Even though CEQ issued this report before BOEMRE conducted the SDEIS, the agency ignored the CEQ report and decided not to reconsider the oil spill assessment in the SDEIS. In so doing, BOEMRE provided three irrelevant reasons for its decision not to consider the Deepwater Horizon spill or re-analyze the oil spill analysis in the FEIS:

- 1) the [Deepwater Horizon] DWH did not change the background conditions in the Chukchi Sea;
- 2) the Chukchi Sea is predominately shallow water unlike the DWH area;
- 3) even if an oil spill is more likely the impacts have already been analyzed.

SDEIS at 16. The agency cannot rely on any of these reasons to justify its failure to re-conduct the oil-spill analysis because they are unrelated to the overarching reason why additional analysis is needed.

BOEMRE's first argument is flawed because the need for additional analysis does not stem from changed background conditions in the Chukchi Sea. Rather, it stems from the inadequacy of MMS's review processes for approving OCS oil-spill assessments and contingency plans that proved disastrous in the Gulf of Mexico. Second, BOEMRE cannot rely on the fact that the Chukchi Sea is shallower than the Deepwater Horizon location as a distinction that makes drilling in the Arctic incomparable to drilling in the Gulf. If anything, drilling in the Chukchi Sea presents significantly more difficult and dangerous conditions due to the harsh Arctic climate that are not present in the Gulf of Mexico.

Nor can the agency rely on the previous analysis in the FEIS. The CEQ report has made clear that the new information related to the Deepwater Horizon Spill triggers the NEPA requirement that the agency re-consider previous analyses related to oil spills in the OCS. CEQ

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Report at 32. The magnitude of the spill in the Gulf highlights the fundamental flaws within the agency review process that allowed such irreparable harm to the Gulf ecosystem. To prevent these harms in the Chukchi Sea, the agency must re-assess the likelihood of an oil spill and consider the environmental impacts that would result. This additional analysis is essential in the Chukchi where the environmental impacts from an oil spill or well blowout would imperil the environment and subsistence resources on which we depend.

The existing analysis is not sufficient to address these impacts – nor does it acknowledge and assess the impacts from a well-blowout. Throughout the SDEIS, BOEMRE describes the multitude of adverse impacts to Arctic ecosystems in the event of an oil spill. For the missing pieces of information related to the impacts of an oil spill on various resources, the agency frequently concludes that the agency "assumes that a large oil spill would lead to significant impacts," so additional information is unnecessary to assist in the decision-making process. SDEIS 1502.22 Analysis at 103; *Id.* at 96 ("The decision-maker already has sufficient information regarding the relative probability and various impacts of a large oil spill to allow a reasoned choice among alternatives"). To us, this callous attitude shows that the agency has already made an "irretrievable commitment of resources" and is unconcerned with identifying and assessing the environmental impacts stemming from an oil spill in any meaningful way.

C. The New Information On Bowhead Whales And Oil Spills Requires A New Range Of Alternatives.

The new scientific information on bowhead whales demonstrates that the range of alternatives in the SDEIS are not adequate – especially since they would all have similar impacts on whales. Scientific studies show bowhead whales use the area in which the agency has auctioned lease blocks. As a result, BOEMRE must propose alternatives that address the impacts to the whales. Yet, the SDEIS fails to meet this objective.

For example, one concern in the SDEIS is whether natural gas production would cause noise and disturbance that would force whales to avoid "high value areas" and risk biological consequences. SDEIS at 79. But the agency concludes that "[a]t present, available data do not suggest that strikes of bowheads by oil and gas-related vessels will become an important source of injury or mortality." SDEIS at 80. Because the new data shows significant use of the proposed lease sale area by bowhead whales, there is an increased likelihood that noise and disturbance will be greater such that strikes may now become an important source of injury.

As this example illustrates, the agency's limited range of alternatives is inadequate in light of the new information about bowhead use of the proposed Lease Sale area. AFCWC asks BOEMRE to propose new alternatives based on time area restrictions that will mitigate the impacts to bowhead whales from oil and gas activities in the proposed lease sale area. AFCWC also asks that the agency develop an alternative that requires the use of new and improved technologies that again would mitigate impacts to bowhead whales. For example, requiring the use of survey equipment that does not depend upon seismic waves to function should be included in this alternative. Currently, the agency's range of alternatives is inadequate. *See, e.g., Te-Moak Tribe of W. Shoshone of Nevada v. U.S. Dept. of Interior*, 608 F.3d 592, 602 (9th Cir.

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2010) (internal citations omitted) (“[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate”).

D. The Significance Thresholds BOEMRE Relied Upon Are Unlawful.

Once again BOEMRE has adopted “significance thresholds” that are far beyond the level of impacts that should ever be permitted by the agency. The prime example is the point at which BOEMRE has determined impacts to subsistence are significant – i.e., “when one or more important subsistence resources becomes unavailable, undesirable for use, or available only in greatly reduced numbers for a period of 1-2 years.” SDEIS at 60. The fact that one or more subsistence resources would be greatly reduced for any period of time let alone a year or two years would be devastating to our communities.

Allowing such impacts to occur would also violate the MMPA. In order to ensure compliance with the MMPA, BOEMRE cannot authorize any activity that would “reduce the availability of the species to a level insufficient for a harvest to meet subsistence needs.” 50 C.F.R. § 216.103 (emphasis added). The International Whaling Commission has recognized a subsistence need by the AEWC villages for 61 landed bowhead whales per year. IWC Schedule, par. 13 (b). Meeting the MMPA’s limitations on industrial activities to protect subsistence harvests is critical since these seasonal, opportunistic harvests are a principal source of food for the AEWC’s villages. Pursuant to the MMPA, the significance threshold adopted by BOEMRE is unlawful. As a result, AEWC recommends that BOEMRE adopt as a significant threshold the following: when the activity will reduce the availability of a subsistence species to a level insufficient for a harvest to meet subsistence needs.

Similar significance thresholds are set for impacts to water, air, and other resources that likewise would have catastrophic consequences for our people and culture and the environment upon which we depend. BOEMRE must set significance thresholds that comport with applicable environmental laws instead of significance thresholds that assume major violations of statutes such as the Clean Water Act, Clean Air Act, and MMPA. In essence what BOEMRE has done here is to assume that activities could be conducted in violation of numerous environmental laws without causing significant impacts. This practice is not supported by the CEQ’s definition of significance. 40 C.F.R. § 1508.27(b)(10) (defining the intensity of the action to include an analysis of violations of other federal environmental laws).

The significance thresholds also unlawfully stress only impacts of a long duration. SDEIS at 60. The CEQ regulations stress that the context for significance includes “[b]oth short- and long-term effects . . .” 40 C.F.R. § 1508.27(a). BOEMRE cannot legally approve short-term disturbances under the theory that subsistence harvests will recover at some point in the future. Instead, the agency must manage offshore activities so that harvest opportunities during each and every harvest season are protected from interference due to activities the agency has authorized.

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E. BOEMRE Did Not Provide An Adequate Analysis of the Impacts from Natural Gas Development and Production.

In the SDEIS, BOEMRE completed the natural gas development analysis in response to the remand from the District Court of Alaska because the FEIS did not include a discussion of the “environmental impacts of natural gas developments, despite industry interest and specific lease incentives for such development.” SDEIS at 10. In BOEMRE’s discussion of impacts from natural gas activities, the agency identifies additional impacts to the environment and subsistence resources but incredibly concludes that these impacts will not be significant. See, e.g., SDEIS at 103 (“No major adverse impacts are expected for Alaska Inupiat Natives, the only significant ‘minority’ group within the action area.”).

This conclusion is inadequate for two primary reasons. First, the agency failed to identify or discuss more mitigation measures that will compensate for these additional impacts. Second, the agency failed to provide an adequate cumulative impacts analysis that is based upon specific data, detailed information, or a meaningful analysis. In the absence of these discussions, the agency did not meet NEPA’s “hard-look” standard for the natural gas development and production analysis.

1. BOEMRE failed to discuss additional mitigation measures.

NEPA requires that an agency include a discussion of mitigation measures in an environmental impact statement. 40 C.F.R. §§ 1502.14(f), 1502.16(h). CEQ regulations explain that “mitigation” includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.20. The Supreme Court has made clear that:

omission of a reasonably complete discussion of possible mitigation measures would undermine the “action-forcing” function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352 (1989).

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As an initial point, the “mitigation measures” in the FEIS are inadequate. The NEPA document fails to call for meaningful mitigation measures that can be enforced at later stages of the OCSLA process. For example, to mitigate the impacts to subsistence users, AEWC recommends that BOEMRE require leasees to enter into Conflict Avoidance Agreements (CAAs) with meaningful measures – such as those AEWC develops each year.

BOEMRE’s decision to not improve upon the measures and to not identify any additional mitigation measures that are “specific” to natural gas development and production is disappointing. SDEIS at 13. By failing to identify new measures, BOEMRE has failed to provide enforceable protections for subsistence and other resources in the Chukchi.

BOEMRE needs to identify additional mitigation measures because the natural gas development and production will have impacts to the environment, natural resources, and subsistence lifestyles that are in addition to and different from those related to oil and gas development. For example, BOEMRE identifies several aspects of natural gas development that may affect the human environment, including:

the presence of infrastructure (offshore platform, offshore and onshore pipelines, and shore base); noise and other disturbance from development activities; vessel, air, and ground transportation; emissions and discharges; and accidental events.

SDEIS at 66.

Specifically, the agency identifies additional impacts to whales from the noise associated with natural gas construction and development activities. See, e.g., SDEIS at 19 (“Natural gas development and production could result in increased noise and disturbance to bowhead as well as fin and humpback whales.”). The agency goes on to say that “it is possible that disturbance caused by these activities could alter the local availability of these resources to harvesters.” *Id.* at 23. But the agency fails to identify any additional measures or discuss how these specific impacts will be mitigated. BOEMRE must provide a complete discussion of additional mitigation measures for natural gas development and production.

2. BOEMRE failed to provide an adequate cumulative impacts analysis.

An agency’s failure to properly conduct a cumulative impacts analysis can be fatal to the NEPA process. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998) (finding an environment assessment inadequate in addressing the cumulative impacts of a proposed action). A proper cumulative impact analysis must include “some quantified or detailed information; . . . [g]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” *Klamath-Siskiyou Wetlands Cir. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (internal citations omitted). Courts have made clear that cumulative impacts analyses based on “very broad and general statements devoid of specific, reasoned conclusions” are inadequate. *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 811 (9th Cir. 1999).

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In the cumulative impacts analysis for natural gas development, BOEMRE failed to provide a meaningful analysis of the cumulative impacts of Lease Sale 193. Among the agency’s conclusions carried over from the FEIS is the statement that “no significant cumulative impacts would result from routine activities associated with the Proposed Action or alternatives.” SDEIS at 106. This conclusion is unsupported by data, specific discussion, or a meaningful analysis and is contrary to the plethora of serious impacts discussed throughout the SDEIS.

Natural gas development and production will have impacts to the environment that are above and beyond those associated with oil and gas development from the following activities:

the presence of infrastructure (offshore platform, offshore and onshore pipelines, and shore base); noise and other disturbance from development activities; vessel, air, and ground transportation; emissions and discharges; and accidental events.

SDEIS at 66. In the SDEIS, the agency discusses how these activities can have adverse impacts to the environment and subsistence resources on which the members of AEWC depend for survival. SDEIS at 79 (“Generally speaking, noise impacts on cetaceans can range from annoyance to behavioral change to physical harm such as hearing loss, the latter of which can result (in serious cases) in an inability to communicate, detect, and/or echolocate.”). Most notably, these impacts include additional disturbance to whales from the noise. SDEIS at 116 (“The most serious concern to Inupiat subsistence users is that potential increases in noise from OCS development could disrupt the normal migration of howhead whales, forcing subsistence whalers into longer hunts farther from shore.”).

When the agency adds the effects from these impacts to those already identified for oil and gas development and other actions in the area, such as shipping, the agency concludes that these do not rise to the level of significant cumulative impacts. SDEIS at 106. AEWC is astonished that additional disturbance to whales from a natural gas pipeline, when combined with the potential for extirpation of species, an already identified potential impact from an oil spill, SDEIS, App. A at 104, does not rise to the level of significant.

Additionally, there is a lack of data and meaningful analysis with which to understand the agency’s conclusion. Throughout the cumulative impacts analysis the agency makes several unsupported statements without providing a meaningful analysis. For example, the agency has not provided specific data to support its conclusion that noise levels will not significantly impact whales. To understand the agency’s conclusion, the public needs a comparison of the levels of noise that whales can withstand to the levels of noise that are cumulatively expected to occur in the project area. In the absence of this data, the public cannot understand the agency’s conclusion that the impacts to whales will be minor and not significant. Thus, it appears that the agency has tailored its conclusions and analysis to fit its prior decision to auction off Lease Sale 193. This is woefully inadequate to meet the “hard look” requirements of NEPA.

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CONCLUSION

One purpose of NEPA is to ensure that an agency conducts a thorough environmental analysis *before* "resources have been committed or the die otherwise cast." *Methow Valley*, 490 U.S. at 349. It is clear BOEMRE has failed to meet this goal and that another supplemental EIS is necessary before the agency decides how to proceed in the Chukchi. We ask that the new EIS: provide a meaningful response to the remand order; address new science about bowhead whale use of the lease sale area; provide a new oil spill analysis; provide a reasonable range of alternatives that include time area restrictions and technological requirements; provide improved mitigation measures that are enforceable; and include a process that involves the public and enables BOEMRE to make an informed decision.

Sincerely,



Harry Brower

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Native Village of Point Lay
Native Village of Point Hope
Alaska Inter-Tribal Council

November 30, 2010

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation
and Enforcement
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Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

Native Village of Point Lay submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

[DESCRIPTION OF GROUP – example:

The Native Village of Point Lay is a federally recognized tribal government that is responsible for the well being of its 950 members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life, hunting bowhead whales, walrus, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean deteriorates so will the physical health of our people. Yet, the importance of hunting runs much deeper. Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.]

The Arctic Ocean is central to our communities' cultural and subsistence traditions, and we are gravely concerned about the potential effects of oil and gas exploration and development upon it. We are worried that BOEMRE intends to allow oil and gas leases and drilling in the Chukchi Sea without first obtaining basic scientific data about the Chukchi Sea and the Arctic environment as a whole. As demonstrated by the National Ocean Policy, the U.S. Geological Survey's Arctic science gap analysis, and the decision to close the Arctic Ocean to commercial fishing until more

Native Village of Point Lay, Native Village of Point Hope, Alaska Inter-Tribal Council Comment

scientific information can be obtained, the Obama Administration has repeatedly promised a commitment to a scientific-based decision-making process for the Arctic Ocean. However, in direct opposition to the Administration's promise, the Alaska Region office of BOEMRE has hastily published a draft SEIS in response to a court order to reconsider the 2008 lease sale 193 in the Chukchi Sea. The court ordered BOEMRE to redo its analysis of missing information about the region and natural gas development that could result from the lease sale. BOEMRE is then supposed to reconsider whether to cancel, modify, or affirm the leases in the Chukchi Sea in light of the new environmental analysis. Instead of doing a thorough job and fulfilling its duties under the National Environmental Policy Act, BOEMRE has rushed out a draft document that seeks to justify the lease sale and the earlier environmental analysis that the court found insufficient.

The current draft SEIS concludes that BOEMRE has no obligation to fill the massive gaps in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of Arctic species and their key habitat to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on mere speculation. We find this unwillingness to analyze the lease sale with scientific rigor deeply offensive. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of the decisions. It needs to do better—as the *Deepwater Horizon* spill demonstrates, we need to know the environmental effects of offshore drilling *before* it happens. Instead of finalizing the current proposed draft, BOEMRE should undertake a complete and thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and reevaluate the impacts of the lease sale in light of the new information. It should then assess anew whether to cancel the leases, modify the leases or affirm the leases. In making this decision, it should not take into account that there are existing lease sale 193 leases in the Chukchi Sea. BOEMRE needs to make a fresh, new decision about lease sale 193.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness—it gambles our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this injustice. BOEMRE must set a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populations in the decision-making process. The policy of the United States is that "[w]hen undertaking to formulate and implement policies that tribal implications, agencies shall . . . consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes." Executive Order 13175 § 3(c)(3). We ask that BOEMRE meet this government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. The input of Alaska Native governments is essential because decisions concerning lease sale 193 will affect the ability of our communities

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to sustain themselves. We also request that BOEMRE provide a meaningful opportunity for public involvement. This was not done here. For example, the Point Hope hearing on lease sale 193 was held on Election Day, which placed an unfair burden on the ability of the community to make its voice heard.

We will do everything in our power to protect our water, land, and way of life and hope that you will address our concerns. We look forward to meeting with your agency on this important issue.

Sincerely,

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Native Village of Point Hope
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November 29, 2010

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Re: Chukchi Sea Draft SEIS

Dear Sir/Madam:

This letter provides comments on the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") Draft Supplemental Environmental Impact Statement ("SEIS") for the Chukchi Sea Planning Area, Oil and Gas Lease Sale 193.

Introduction

These comments are submitted by the Arctic Slope Regional Corporation ("ASRC"). ASRC is an Alaska Native Regional Corporation created at the direction of Congress under the terms of the Alaska Native Claims Settlement Act of 1971 ("ANCSA"). See 43 U.S.C. § 1606. This landmark legislation extinguished Alaskan aboriginal land rights, and authorized and directed Alaskan Natives to adopt a western corporate model, managing lands, funds and natural resources. Although the western corporate model was foreign to Alaska Natives, our people were also able to manage our assets consistent with our sound stewardship and values. Under ANCSA, Iñupiat Eskimos living on the North Slope in 1971 were enrolled as shareholders in ASRC. ASRC has since issued additional shares to their descendants, giving ASRC a shareholder base of approximately 11,000 Iñupiat Eskimos.

Through ANCSA, Congress created ASRC and provided ASRC with the ability – and duty – to use the North Slope's natural resources to benefit Iñupiat people financially and culturally. Congress authorized ASRC "to provide benefits to its shareholders who are Natives or descendants of Natives or to its shareholders' immediate family members who are Natives or descendants of Natives to promote the *health, education or welfare* of such shareholders or family members." 43 U.S.C. § 1606(r) (emphasis added). Consistent with this unique legislation, ASRC is a for-profit business that is committed both to providing sound returns to our shareholders and to preserving our Iñupiat way of life, culture, and traditions.

Operating in one of the least hospitable natural climate in the world, we have built businesses to provide jobs for our people, tax revenues for our Villages and Boroughs, and cash dividends for our shareholders. At the same time, we have integrated

maintenance and protection of the Iñupiat cultural and traditional practices into the ASRC business.¹

ASRC itself owns approximately 5,000,000 acres of on-shore land (surface and subsurface) on the North Slope – an area nearly the size of Massachusetts. Our lands are located within our regional area of 89,000 square miles – an area the size of Minnesota. Our regional area follows the coastline of the Beaufort and Chukchi Seas. There are eight Iñupiat Villages in the region, six of which are located on or near the coastline of the Beaufort and Chukchi Seas, each of which have Village Corporations pursuant to ANCSA. In addition to ASRC-owned lands, Alaskan Native-owned lands include property of Village Corporations, Villages or Boroughs and native allottees. These lands are distributed within a rugged and challenging terrain. Our businesses depend on activities on lands owned by others, including the federal and state governments. The Iñupiat and our ancestors have occupied and depended upon these Northern Alaska lands and waters since time immemorial, extending at least 10,000 years.

In just a few short decades, the Iñupiat have adapted from an economy based almost solely on subsistence to a mixed economy. We operate ASRC consistent with Iñupiat cultural values, and our 21st century life is an integration of traditions into a contemporary economy. The cash portion of that mixed economy depends on oil and gas and other natural resource activity to provide the jobs, economic activity, and a tax base for our local government that make available basic amenities such as schools, health care and sanitation facilities – all of which, although taken for granted elsewhere in the United States, are operated and maintained in our region at considerable cost. In carrying out its congressionally-mandated mission, ASRC and its subsidiary companies² are active participants in North Slope oil exploration, development, and production. This is the source of many jobs for ASRC's Iñupiat shareholders and many contracting opportunities for ASRC's subsidiaries. This includes work as contractors in oil field developments, engineering work, maintenance of pipelines, and leasing property for exploration and development.

In the 21st century and into the future, the Iñupiat's ability to maintain our traditions, our communities and the rudimentary services and amenities that make it possible for our

¹ Even with this increasingly mixed economy, subsistence hunting continues to provide 40% of caloric intake for Iñupiat Eskimos on the North Slope, with substantially higher percentages in the more rural villages. Alaska Natives' unique cultural and subsistence needs have been repeatedly recognized by Congress. Although the Iñupiat's aboriginal hunting rights were extinguished by ANCSA, see 43 U.S.C. § 1603(b), Congress ensured that subsistence rights to hunt, fish and make handicrafts would be protected through a number of other statutes, including the Alaska National Interest Lands Conservation Act ("ANILCA"), 16 U.S.C. § 3111(1), 3111(4), the Marine Mammal Protection Act of 1972 ("MMPA"), 16 U.S.C. § 1371(b) and the ESA, 16 U.S.C. § 1539(e).

² The ASRC family of companies includes ASRC Energy Services, Inc.; ASRC Construction Holding Company, Inc.; Petro Star, Inc.; ASRC Federal and other entities and subsidiaries.

shareholders to survive and thrive on the North Slope all depend upon access to natural resources and an active local resource development industry - it is the only economic development in our region.

Comments

ASRC has purposely not commented on previous Outer Continental Shelf Lease Activities. In fact ASRC, through its Board of Directors, has historically opposed on-shore exploration in both the Chukchi and Beaufort Seas. However, ASRC has evaluated the long-term scenarios with respect to the onshore North Slope oil and gas industry. We have come to the conclusion that the future of the Trans Alaska Pipeline System depends on additional oil production. Onshore lands have been rendered off-limits by government policy. With the production decline of the larger onshore fields and few marginal discoveries to replace them, the future of TAPS (and the economic future of both the Alaskan North Slope and the State of Alaska itself) depends on the development of additional production from offshore prospects. If the TAPS goes away, then there is no North Slope economy. We have moved beyond the "pro" and "anti" OCS discussion; our communities and our region need additional development. And yet we depend upon environmentally responsible development, as our communities also depend upon a healthy marine ecosystem. It is for these reasons that ASRC is submitting comments on the Draft Supplemental Environmental Impact Statement for the Chukchi Sea Oil and Gas Lease Sale 193.

The Arctic Outer Continental Shelf ("OCS") holds significant potential for discovery of large oil and gas accumulations that could assist in meeting the nation's energy needs. The Chukchi Sea is considered the nation's most prolific, unexplored offshore basin in North America. BOEMRE has estimated that Alaska's OCS has up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The size and significance of the potential in the Chukchi Sea has caused ASRC to re-evaluate its impacts to our shareholders, our communities, our borough and our businesses – all of which our region relies on for a viable economic future.

In the Draft SEIS the BOEMRE analyzes three specific issues raised by the U.S. District Court of Alaska. The District Court Ordered remanding the BOEMRE's Chukchi Sea Lease Sale 193 Final EIS ("FEIS") to address three areas of concern with the FEIS. The three concerns are:

1. Analyze the environmental impact of natural gas development;
2. Determine whether missing information identified by BOEM in the FEIS for Lease Sale 193 was essential or relevant under statute; and
3. Determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

The SEIS is intended to provide the Secretary of the Interior with sufficient information and analysis to make a final informed decision among the alternatives on whether to affirm, modify or cancel Lease Sale 193.

Summary of Major Comments by ASRC

ASRC has historically been very concerned about Arctic OCS exploration and its effects on the subsistence activities of our communities and shareholders. Our concerns have centered around four fundamental areas:

- Impacts to the marine mammals our culture is dependent on;
- Impacts to the environment our marine mammals are dependent on;
- Risks of a catastrophic oil spill that would affect our coast and communities; and,
- Industry's ability to clean up a spill in ice-infested waters.

With respect to the above issues we have taken the stance that the Iñupiat have the most to lose if any or all of the above impacts occur. Based on these fundamental concerns ASRC has been notably silent on the process and issues with respect to oil and gas leasing in the Arctic OCS. We have diligently worked to gain an understanding of the new technologies to be employed by industry and we have watched with disbelief the Gulf of Mexico oil spill that occurred in April 2010. It is with this background and careful consideration that ASRC has decided to comment on the Draft SEIS.

ASRC recommends that Lease Sale 193 be affirmed as held in 2008. After careful review and analysis we feel the Draft SEIS provides sufficient information and analysis to support an informed decision by the Secretary of Interior affirming Sale 193. Under our review of the Draft SEIS we have also reviewed the earlier FEIS for Lease Sale 193 and we feel the agencies have sufficiently addressed this issues set forth by the District Court.

Item One for review ordered by the District Court was to analyze the environmental impact of natural gas development. We believe that gas development scenarios have been adequately analyzed for environmental cumulative impacts. Gas development for the on-shore areas of the North Slope of Alaska is still an economic uncertainty despite the fact of large gas accumulations existing at the Prudhoe Bay and Pt. Thomson fields. Based on this experience we feel it is actually premature to try to evaluate the environmental impacts of gas development from the Chukchi lease area as part of this document despite the fact that industry expressed interest in gas and asked for specific lease incentives for gas development.

Item Two for review ordered by the District Court was to determine whether missing information identified by BOEM in the FEIS for Lease Sale 193 was essential or relevant under 40 CFR 1502.22. In the Draft SEIS the BOEMRE states that "[R]ecurring reasons why missing information is not essential to a reasoned choice among alternatives under 40 CFR 1502.22 include:

- The availability of sufficient information to support sound scientific judgments and reasoned managerial decisions, even without the identified incomplete, missing, or unavailable information.

- The presumption that adverse effects would certainly occur under the specific circumstance to which the incomplete information applies. For instance, significant adverse effects are presumed if marine mammals are contacted by a large oil spill; it may not be essential to understand every potential physiological mechanism (for instance, potential impacts to the function of a whale's blowhole) through which these adverse effects may occur.
- The commonality of potential impacts and their severity among all action alternatives, which substantially reduced the utility of incomplete information to the decision-maker.
- The existence of other environmental laws and regulations that would preclude significant adverse effects on particular resources.
- The understanding that certain items of presently missing or incomplete information will be known (and utilized to avoid or minimize adverse impacts) at a later stage of OCS Lands Act environmental review, when the information could potentially become essential."

ASRC feels that it is necessary to acknowledge that there will always be project opponents who feel there is not enough data to be deemed sufficient in any analysis. In the case of the previous FEIS and now with the Draft SEIS ASRC contends that there is sufficient information available to support sound scientific judgment and decisions. Additional data and information collection continues to occur with respect to all aspects of the Arctic OCS and as that data and information is collected and analyzed all parties continue to gain knowledge that can be built into mitigations and future environmental review.

It is actually through the concerns brought forward due to Arctic OCS leasing that research dollars have increased to allow for the collection of important data with respect to the Arctic marine environment. The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas. After the Gulf of Mexico incident we have seen increased scrutiny on the Arctic OCS with calls that there is not enough data.

Our position is to not allow the de facto moratorium to continue while additional research conducted and analyzed but to instead make the research a component of a solid regulatory program and industry mandate moving forward. All parties benefit from the resources and research being directed at the Arctic OCS.

Item Three ordered for review by the District Court is to determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. In responding to this item of review the BOEMRE has stated that if information relevant to reasonably foreseeable significant adverse impacts cannot be obtain because the costs of obtaining it are exorbitant the a statement will be made that such information was incomplete or unavailable. A statement of the relevance of the missing data will be made as to its impacts on the human environment, and a summary of credible scientific evidence as to its impact on the human environment will be included in the

environmental impact statement. ASRC feels this is a reasonable approach to addressing the costs of obtaining missing information. Our response to this item is consistent with our response for item two since both addresses the issue of missing data. Ongoing research and data collection will continue and there are other times in the OCS process that new data and research can be incorporated into the knowledge-base to make informed decisions.

On-going data collection is a critical component of the affirming the FEIS and continuing with the lease activities. It is through this additional activity that our communities and residents gain Western scientific information about our off-shore environment while at the same time having the opportunity to incorporate our Iñupiat traditional knowledge into the mix. Our shareholders have been employed as researchers and marine mammal observers in the Chukchi lease area as new scientific baseline data is collected. This is a double-win for our people; they are employed in the research and data collection process while at the same time learning more about our nature environment in the process. We see this as a positive impact to our region and our understanding.

ASRC believes rescinding the leases and allowing a de facto moratorium to continue will harm the North Slope's and Alaska's economies and discourage future industry investment, without a corresponding benefit to the environment. Economic estimates state that the Arctic OCS would provide upwards of 4,000 direct jobs on the North Slope with direct tax revenue to the North Slope Borough of over \$3.0 billion from the on-shore facilities and infrastructure. Jobs and the North Slope Borough tax base are critical to the long-term economic sustainability to our communities. As such it is important to ASRC that the Secretary affirms Sale 193.

We feel the oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities. There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.

Despite the Gulf of Mexico incident, we recognize the difference in geologic conditions between the Macondo Well in the Gulf and prospective exploratory drilling in the Chukchi Sea. The differences between the two areas are significant and they cannot be compared as analogues. First the Macondo Well was drilled in an ultra-deep water column into a high- or over-pressured reservoir. By contrast geologic targets in the Chukchi are in relatively shallow water and based on past drilling in the leased area we know that the geologic targets are normally pressured greatly reducing the potential for a 'Macondo-style' blow-out in the Chukchi.

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. In addition, we are familiar with, and favorably impressed by the additional drilling safeguards introduced by the Chukchi Sea explorers and by their methods to minimize other environmental impacts that have historically been deemed inevitable for all OCS exploration wells. The spill prevention portion of today's Arctic OCS plans is truly and offers us great confidence in a successful outcome. Any oil spill in the Arctic OCS will be catastrophic to our communities and people and so ASRC has taken a very deliberate approach in our consideration for off-shore exploration and development. As part of our assessment we have reviewed the spill prevention and response components anticipated for the Arctic OCS and we feel industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give us a high level of confidence that exploration and development can occur safely and without harm to our off-shore subsistence environment. Since the Gulf of Mexico spill, industry has increased its prevention and spill response plans creating a system of redundancy that provides us with some comfort they will be able to respond to the unlikely event of a spill in an immediate and responsive manner.

All of these contrasts should lead BOEMRE to conclude that exploration should move forward in the Chukchi.

ASRC appreciates the opportunity to present these comments on the Draft Supplemental Environmental Impact Statement for the Chukchi Sea Oil and Gas Lease Sale 193.

Sincerely,
ARCTIC SLOPE REGIONAL CORPORATION


Richard Glenn
Executive Vice President



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November 19, 2010

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Anchorage, Alaska 99503-5820

Subject: OCS Testimony, Calista Corporation
Hearing Date: Tuesday, November 9, 2010
Time: 7:00 p.m.

My name is Christine Klein, Chief Operating Officer for Calista Corporation. I'm here to provide testimony on behalf of Calista, one of Alaska's 13 Regional Native Corporations created after Alaska Native Claims Settlement Act in 1971. Calista represents more than 13,000 direct shareholders, as well as, their descendants of Yupik, Cupik, and Athabascan heritage. It includes 56 remote villages throughout Yukon-Kuskokwim Delta and Bering Sea coast of western Alaska.

Many of our shareholders continue to live in remote villages which experience higher costs of living especially fuel and heating oil which due to a lack of transportation infrastructure –people must travel by boat on the rivers, aircraft, and snow machines. Fuel is 3 to 5 times higher than in the rest of Alaska and Lower 48 States! Heating fuel can often cost more than \$13/gallon. Can YOU imagine what would or will happen when You and Other citizens in the rest of Alaska and US get the opportunity to pay \$13/gallon for heating fuel—like our Calista residents pay, right now, right here, already???

1. We support OCS environmentally safe drilling and want to see MMS/BOEM Lease Sale 193 affirmed as intended in 2008, for the purpose of producing oil, and boosting domestic oil production from existing U.S. energy deposits.
 - a. To renege on the intent of that sale which was upheld in the EIS and SEIS process is an injustice defying reason given current economic circumstances.
 - b. The SEIS provides sufficient information & analysis to support an informed decision.
 - c. More delay, rescinding of leases, and continuing moratoriums will further harm the Alaska and U.S. economy, and discourage industry investment, without any corresponding benefit to either the environment or citizens.
2. We have confidence in the regulatory and scientific community of Alaska that has risen to the challenges of responsibly overseeing offshore oil and gas development in ensuring protection of vital wildlife and water resources.
 - a. There has never been a blowout in Alaska or Canadian Arctic that resulted in an oil spill. Thirty wells were drilled in Beaufort and five in Chukchi – all without incident in the '80's utilizing older technology compared to what exists today.



- b. The North Slope of Alaska and offshore environment are some of the most studied energy basins in the world. Over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
 - c. Any oil and gas production will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS, as well as state processes & permits
 - d. The State of Alaska Dept. of Environmental Conservation has the first and one of the only petroleum pipeline inspection and oversight programs in the U.S. despite being one of the youngest states in the country. It is leading the way in such programs aren't even yet developed elsewhere like California and Nevada
3. The petroleum industry in Alaska, has demonstrated that it can in fact operate safely in arctic and subarctic conditions.
- a. The industry in Alaska has committed to unprecedented actions and measure to prevent spills and response actions far above and beyond required by law, or done any other place in the world.
 - b. Shell has spent billions of dollars on Leases, baseline studies, seismic, engineering, environmental protection, created good partnerships with the indigenous 1st peoples of Alaska to further our economic development goals participating in the global economy while preserving our native culture. They have gone far beyond environmental and safety standards required anywhere else; yet, U.S. Federal actions have resulted in further delay and uncertainty, sending a loud message to industry the U.S. and Alaska are very risky places to do business. These actions have caused Alaska and the US financial harm that may never be overcome.

All of these things along with the intense scrutiny that occurs in AK and tough permitting processes, give us a high level of confidence that exploration and development can occur in the OCS safely to all creatures great and small.

Energy costs continue rising, further challenging our families and businesses, as well as, the struggling US economy. It makes no sense when there is oil that can be produced in an environmentally safe manner here in our own state and country best.

Today, parents, children, Native corporation shareholders and leaders in the Calista Region need affordable energy to survive, as well as, an opportunity to participate in a global economy. Responsible development of petroleum resources in the outer continental shelf of Alaska, and offshore leasing by BOEM in the OCS, will provide that opportunity.

thorough job and fulfilling its duties under the National Environmental Policy Act, BOEMRE has rushed out a draft document that seeks to justify the lease sale and the earlier environmental analysis that the court found insufficient.

The current draft SEIS concludes that BOEMRE has no obligation to fill the massive gaps in Arctic scientific knowledge before finalizing its analysis of lease sale 193. The Alaska Region has determined that it does not need even minimal scientific data on things like the distribution of Arctic species and their key habitat to reach conclusions regarding the risks of oil and gas development. It appears to believe that it can base its oil and gas leasing decisions on mere speculation. We find this unwillingness to analyze the lease sale with scientific rigor deeply offensive. BOEMRE is putting at risk our way of life without even knowing enough to disclose the risks or consequences of the decisions. It needs to do better—as the *Deepwater Horizon* spill demonstrates, we need to know the environmental effects of offshore drilling *before* it happens. Instead of finalizing the current proposed draft, BOEMRE should undertake a complete and thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and reevaluate the impacts of the lease sale in light of the new information. It should then assess anew whether to cancel the leases, modify the leases or affirm the leases. In making this decision, it should not take into account that there are existing lease sale 193 leases in the Chukchi Sea. BOEMRE needs to make a fresh, new decision about lease sale 193.

BOEMRE should move slowly and cautiously before allowing oil and gas activities in the Chukchi Sea. Oil and gas development, especially without adequate planning, gambles not only a pristine, changing, and rich wilderness—it gambles our home and our way of life. If an oil spill occurs and the sea and its subsistence resources that we rely upon are polluted or disappear, we are the ones who will bear the ultimate consequences. You have an opportunity to prevent this injustice. BOEMRE must set a new course and reassess what information it needs to complete a proper environmental analysis.

BOEMRE should also ensure that, as required by law, it involves Alaska Native governing bodies and local populations in the decision-making process. The policy of the United States is that "[w]hen undertaking to formulate and implement policies that tribal implications, agencies shall . . . consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes." Executive Order 13175 § 3(c)(3). We ask that BOEMRE meet this government-to-government consultation requirement by sitting down with Alaska Native governing bodies to discuss the lease sale decision. The input of Alaska Native governments is essential because decisions concerning lease sale 193 will affect the ability of our communities to sustain themselves. We also request that BOEMRE provide a meaningful opportunity for public involvement. This was not done here. For example, the Point Hope hearing on lease sale 193 was held on election day, which placed an unfair burden on the ability of the community to make its voice heard, and no government to government meeting was held after Point Hope had to cancel an initial meeting due to conflicts. In Barrow, BOEMRE held the public hearing on the lease sale at the same time as the government to government meeting with ICAS, causing board members to have to chose between the two.

We support and join the comments submitted on the draft SEIS by the Alaska Eskimo Whaling Commission and the Alaska Wilderness League, et al. conservation groups. We will do everything in our power to protect our water, land, and way of life and hope that you will address our concerns.

Sincerely,

Doreen Lampe
President

INUPIAT COMMUNITY of the ARCTIC SLOPE Comment
INUPIAT COMMUNITY of the ARCTIC SLOPE
an IRA Regional Tribal Government



P.O. Box 934 • Barrow, Alaska 99723
Ph: (907) 852-4227 1-888-788-4227 Fax: (907) 852-2449

November 29, 2010

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation
and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
E: BOEMREAKPublicComm@boemre.gov

Re: **Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)**

Dear Regional Director:

The Inupiat Community of the Arctic Slope (ICAS) submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

ICAS is the federally recognized regional tribal government for the Inupiat people of the North Slope. ICAS represents communities—Anaktuvuk Pass, Atkasuk, Barrow, Kaktovik, Nuiqsut, Point Hope, Point Lay, and Wainwright—that depend upon Arctic marine mammals to sustain and continue a subsistence lifestyle that is central to our culture and traditions. We are concerned that offshore oil and gas activities may put at risk areas of importance to Inupiat subsistence resources and cultural traditions, and we believe such activities require careful review.

The Arctic Ocean is central to our communities' cultural and subsistence traditions, and we are gravely concerned about the potential effects of oil and gas exploration and development upon it. We are worried that BOEMRE intends to allow oil and gas leases and drilling in the Chukchi Sea without first obtaining basic scientific data about the Chukchi Sea and the Arctic environment as a whole. As demonstrated by the National Ocean Policy, the U.S. Geological Survey's Arctic science gap analysis, and the decision to close the Arctic Ocean to commercial fishing until more scientific information can be obtained, the Obama Administration has repeatedly promised a commitment to a scientific-based decision-making process for the Arctic Ocean. However, in direct opposition to the Administration's promise, the Alaska Region office of BOEMRE has hastily published a draft SEIS in response to a court order to reconsider the 2008 lease sale 193 in the Chukchi Sea. The court ordered BOEMRE to redo its analysis of missing information about the region and natural gas development that could result from the lease sale. BOEMRE is then supposed to reconsider whether to cancel, modify, or affirm the leases in the Chukchi Sea in light of the new environmental analysis. Instead of doing a

Native Village of Kotzebue Comment

Native Village of Kotzebue
Kotzebue IRA

November 29, 2010

Regional Director
Alaska OCS Region, BOEMRE
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

RE: **Chukchi Sea Draft SEIS**

<i>Knowledge of Language</i>	The Native Village of Kotzebue appreciates the opportunity to comment on the recent release of the draft Chukchi SEIS to address the issues specified by the U.S. District Court for Alaska in regards to insufficiencies with the original EIS and for the government-to-government meeting held between BOEM and the Tribe as part of this process.
<i>Knowledge of Family Tree</i>	
<i>Sharing</i>	
<i>Humility</i>	
<i>Respect for Others</i>	The members of the Tribe continue to rely on the healthy populations of fish and wildlife that use the Chukchi Sea for feeding, reproduction and overall survival. In the case of the associated overland pipeline and road on the North Slope this would include terrestrial species used for subsistence, especially the Western Arctic Caribou Herd, which calves in the area and uses the coastline for insect relief. The Tribe believes that the high quality of the current environment of the Chukchi Sea provides for robust and healthy populations of marine wildlife and negative impacts on this habitat through poorly informed development, would pose an unnecessary risk to this continued quality; it is for this reason that the Tribe has been undertaking and supporting continued research into the ecology of the Chukchi Sea and Kotzebue Sound specifically. Unfortunately, the current level of baseline environmental information makes it very challenging, if not in the majority of cases impossible, to track changes in the environment, or harm to fish and wildlife, caused by industry during the exploration phase of the Lease 193 area. This makes it difficult to know what impacts actually occur, or may occur, or whether mitigation plans put in place are effective.
<i>Love for Children</i>	
<i>Cooperation</i>	
<i>Hard Work</i>	
<i>Respect for Elders</i>	
<i>Respect for Nature</i>	
<i>Avoid Conflict</i>	
<i>Family Roles</i>	
<i>Humor</i>	
<i>Spirituality</i>	While the Tribe concurs with the court that it is important to address the environmental impacts of natural gas development and the BOEM attempts to do this in the draft SEIS, without a sufficient level of understanding of the ecological processes in place it will be difficult to sufficiently address basic environmental impacts. A very cursory understanding of the ecology also makes determining whether missing information identified by BOEM in the sale 193 FEIS is essential, or relevant, a very difficult undertaking. Both of these issues are at the heart of the courts instructions.
<i>Domestic Skills</i>	
<i>Hunter Success</i>	
<i>Responsibility to Tribe</i>	

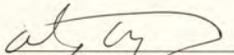
Apparently the strategy by BOEM in response to the courts instructions is to list a lot of what is not known and summarily conclude that none of this information is needed before the lease sale proceeds. This conclusion can be reasonably interpreted by affected communities to demonstrate a lack of serious concern by BOEM for the Chukchi Sea environment and all the wildlife and communities that it supports. This approach appears to defy the science driven policy committed to by the Obama Administration and does nothing to reassure affected communities that the federal government is serious about demanding a sufficient environmental understanding before the process moves forward.

Native Village of Kotzebue Comment

While admittedly it is only possible to obtain a basic level of knowledge in regard to the complex interrelated ecological processes at play in the Chukchi Sea, it is the position of the Tribe that a serious attempt to obtain this level of understanding is necessary before the process moves forward. As BOEM is aware many research projects are currently underway and much of the needed missing information is being collected and analyzed. For instance the Tribe has spent the last 6 years studying ice seals and their habits and habitats, yet sufficient time for publication of results has not been provided before BOEM actions are being taken. There are many more similar research undertakings occurring by other parties, but again without sufficient time to publish and incorporate findings in an analysis of environmental impacts of a lease sale. In addition, as recent assessments of the ability to clean oil in ice have demonstrated, there remain serious challenges and concerns regarding the ability to respond successfully to such an event, especially under worst case scenarios of both kind of spill and seasonal timing of such an incident

Instead of finalizing the current proposed draft, BOEM should undertake a thorough analysis of all missing scientific information concerning the Chukchi Sea and the Arctic environment, prepare a revised draft SEIS that incorporates the new information, and reevaluate the impacts of the lease sale. In order to meet this need there must be an ongoing commitment from BOEM, other federal agencies, and industry, to aggressively fund and seek to increase the knowledge of the affected environment and impacts on communities, so there will not remain such a large knowledge gap on which to base decisions in the future. Part of this effort should include specific opportunities for communities along the Chukchi Sea to undertake research to provide information on concerns of priority to them and which will inform subsequent steps and decisions in the development of the Lease 193 area. Currently, targeted communication and involvement with the Alaska Studies Program, in relation to local Chukchi Sea communities, is largely absent, and the BOEM could correct this by informing coastal communities living on the shores of the Chukchi Sea about current research and creating specific funding opportunities for communities to undertake, or actively participate in, future research related to Lease 193 development.

Thank you for your consideration.



Alex Whiting
Environmental Specialist



Cole Schaeffer
Executive Director

Page 2 of 3

Native Village of Point Hope Comment

demonstrated by the National Ocean Policy, the U.S. Geological Survey's Arctic science gap analysis, and the decision to close the Arctic Ocean to commercial fishing until more scientific information can be obtained, the Obama Administration has repeatedly promised a commitment to a scientific-based decision-making process for the Arctic Ocean. However, in direct opposition to the Administration's promise, the Alaska Region office of BOEMRE has hastily published a draft SEIS in response to a court order to reconsider the 2008 lease sale 193 in the Chukchi Sea. The court ordered BOEMRE to redo its analysis of missing information about the region and natural gas development that could result from the lease sale. BOEMRE is then supposed to reconsider whether to cancel, modify, or affirm the leases in the Chukchi Sea in light of the new environmental analysis. Instead of doing a thorough job and fulfilling its duties under the National Environmental Policy Act, BOEMRE has rushed out a draft document that seeks to justify the lease sale and the earlier environmental analysis that the court found insufficient.

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1/10/2011

Native Village of Point Hope Comment**Routhier, Michael**

From: Lily Tuzroyluke [lilyh.tuzroyluke@tikigaq.org]
Sent: Tuesday, November 30, 2010 2:11 PM
To: BOEMRE AK Public Comments
Subject: Native Village of Point Hope: Public Comments
Attachments: Chukchi SEIS Comments Nov 2010.doc

Please accept the attached comments on behalf of our President Mrs. Caroline Cannon, and our Tribal members of the Native Village of Point Hope.

November 30, 2010

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
E: BOEMREAKPublicCommen@boemre.gov

Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

The Native Village of Point Hope submits the following comments on the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS).

The Native Village of Point Hope is a federally recognized tribal government that is responsible for the well being of its 950 members. It is also the oldest, continuously inhabited village in all of North America. Our members have harvested the sea for thousands of years. We preserve our traditional way of life, hunting bowhead whales, walrus, seals, polar bears, beluga whales, and various fish and sea birds. Where we live, a half-gallon of milk costs nine dollars, and families depend on subsistence hunting as a source of healthy food. Subsistence resources are so vital to our well being that if the health of the ocean deteriorates, so will the physical health of our people. Yet, the importance of hunting runs much deeper. Hunting is central to our culture as a way to celebrate our heritage and maintain ties within the community. The ocean is our garden. It is what sustains us physically and spiritually as individuals and as community members.

The Arctic Ocean is central to our communities' cultural and subsistence traditions, and we are gravely concerned about the potential effects of oil and gas exploration and development upon it. We are worried that BOEMRE intends to allow oil and gas leases and drilling in the Chukchi Sea without first obtaining basic scientific data about the Chukchi Sea and the Arctic environment as a whole. As

1/10/2011

Page 3 of 3

Native Village of Point Hope Comment

We support and join the comments submitted on the draft SEIS by the Alaska Wilderness League, et al. conservation groups. We will do everything in our power to protect our water, land, and way of life and hope that you will address our concerns.

Sincerely,

Caroline Cannon
President
Native Village of Point Hope

--
Lily H. Tuzroyluke, Executive Director
Native Village of Point Hope
P.O. Box 109
Point Hope, Alaska 99766
(907) 368-2330 p
(907) 368-2332 f

1/10/2011

Native Village of Point Hope Comment



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P.O. Box 109
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November 30, 2010

VIA EMAIL

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation
and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5802
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Native Village of Point Hope Comment

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Native Village of Point Hope Comment

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Sincerely,

Caroline Cannon
President
Native Village of Point Hope

Ukpeagvik Inupiat Corporation Comment



Regional Director John Goll
Bureau of Energy and Ocean Management Regulation and Enforcement
Alaska OCS Region
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

30 November 2010

RE: OCS Lease Sale 193 Supplemental EIS Comments

Dear Mr. Goll:

Ukpeagvik Inupiat Corporation (commonly known as UIC), created under the Alaska Native Claims Settlement Act of 1972, serves the social and economic interests of the Inupiat people from the community of Barrow, Alaska - the northernmost community in the United States. UIC is the village corporation of Barrow, one of eight villages in the Arctic Slope Region.

UIC actively supports the oil and gas industry in Alaska. Our family of companies employs 1,400 people worldwide with 750 employees here in Alaska. Core services include scientific support, engineering, construction, logistical, and marine transportation services, as well as regulatory consulting and compliance for the oil and gas industry.

Our community and shareholders hold enormous value for the Inupiat traditional subsistence lifestyle and depend upon the Arctic Ocean. We also recognize the need for, and economic opportunity provided by oil and gas development to our people.

UIC shares the interests of the North Slope Borough, as our coastal district governing body, to create a strong and growing industrial sector in the Alaskan Arctic. We strive to develop long-term, meaningful employment opportunities for our shareholders, their descendants and dependents.

Each year our young people go further from our community to take advantage of employment opportunities. Responsible oil and gas development in the Chukchi and Beaufort Seas will provide diverse employment opportunities and careers for our young shareholders and support the continuity of our way of life - balancing responsible resource exploration and development with our customary and traditional subsistence practices.

UIC continues to support responsible and accountable oil and gas exploration and development as captured in a policy statement from our Board of Directors:

In our interactions with the oil and gas industry, we will leverage our position to benefit the Ukpeagvik Inupiat Corporation Family of Companies, its shareholders,

Ukepeagvik Inupiat Corporation Comment

Bureau of Energy and Ocean Management Regulation and Enforcement

30 November 2010

Page 2

and the community. We acknowledge the inevitability of exploration and development by the oil and gas industry and we will support exploration and development activities as long as they are done in a way that ensures:

- *Protection and preservation of the Inupiat culture and subsistence lifestyle*
- *Economic benefit for our community*
- *Employment for our shareholders and their families, and*
- *Contract opportunities for our companies*

UIC shares an interest with the North Slope Borough in protecting our Inupiat heritage and traditional way of life through local participation in project planning and implementation, including engagement in all OCS proposed activities in our region.

We believe industry should integrate local and traditional knowledge with scientific knowledge to support environmentally sound and culturally sensitive activities in the Arctic.

We believe that when industry partners with the local people to share and apply this Traditional Knowledge, it will lead to preservation of our land, our resources, and our way of life.

UIC recognizes that finding balance between the goals of economic opportunity and preserving our way of life will require compromise, diligence, creative thinking, open communications and active stakeholder engagement.

In addition to employment opportunities, UIC believes there should be a provision for coastal producing states to share in federal oil and gas revenues generated on the adjacent OCS. Specifically, UIC recommends federal OCS revenues generated in Alaska should be allocated to the communities within reasonable distance to development. These communities serve as the platforms for onshore and offshore lease activities, and must develop resources and infrastructure to support industrial development while managing potential effects of that development on the people and environment.

UIC values the opportunity to provide comments and looks forward to continued engagement with BOEMRE to communicate the challenges, impacts, and opportunities that the OCS presents to our locally affected community.

Respectfully,



Chris J. Morgan
Ukpeagvik Inupiat Corporation
Chief Executive Officer

550 WEST 7TH AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
FAX: (907) 269-8918

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE COMMISSIONER

November 29, 2010

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive,
Suite 500, Anchorage, Alaska 99503-5820

Re: Chukchi Sea Planning Area Oil and Gas Lease Sale 193
Draft Supplemental Environmental Impact Statement

The State has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193. We compliment the BOEMRE for the work put into this SEIS. Alaska has a tremendous stake in the successful progress of leasing, exploration, and development of the Arctic OCS. In a study conducted by the University of Alaska Anchorage Institute of Social and Economic Research, the Alaska economy would be sustained by the addition of 35,000 jobs with a \$72 billion payroll over a 50-year period. Development of the OCS would spin off approximately \$5.8 billion in additional state and local revenues. OCS development is a prime source of the continued health and diversity of our onshore oil industry. Production from the OCS has several indirect effects including lower pipeline tariffs and longer life of the TAPS pipeline, a more robust and lower cost service industry, and longer-lived onshore facilities. Note also that these state impacts pale in comparison to the many more jobs, incomes, and energy for the Nation as a whole.

The purpose of the SEIS is to provide new analysis in accordance with the United States District Court for the District of Alaska Order remanding the BOEMRE's Chukchi Sea Lease Sale 193 Final EIS. The District Court's Order instructs the BOEMRE to address three concerns: (1) Analyze the environmental impact of natural gas development; (2) determine whether missing information identified by BOEMRE in the 193 FEIS was essential or relevant under 40 CFR 1502.22; and (3) "determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown."

It is apparent from our review of the SEIS that BOEMRE has addressed the court's three concerns in a comprehensive manner. Moreover, the Governor of Alaska previously expressed support for Lease Sale 193 with the inclusion of the Corridor II Deferral in 2007 and Lease Sale 193 was reviewed and found consistent with the Alaska Coastal Management Program on October 30, 2007. The State of Alaska's position remains that the Corridor II Deferral represents the best balance of environmental protection and development of the nation's oil and gas resources. Therefore, we urge the Secretary to affirm Lease Sale 193 without delay. The comments below summarize the State's review of the SEIS in the context of the court's instruction to BOEMRE.

Regarding the court's concern for analysis of the environmental impact of natural gas development, the BOEMRE correctly concludes that natural gas development "would merely extend the life of existing plays and infrastructure and build new facilities within previously disturbed areas." The State concurs with BOEMRE that the incremental nature of natural gas development "would be

"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans"

November 29, 2010
Page 2 of 2

considerably smaller than the incremental contribution of Sale 193 as analyzed in the [Sale] 193 FEIS and that leasing, exploration, and oil and gas development and production would represent only a small percentage of the foreseeable cumulative activities."

Regarding the court's concern about information identified as missing from the Lease Sale 193 Final EIS, it is the State's position that BOEMRE's comprehensive analysis and methodology is in compliance with 40 CFR 1502.22 and meets the requirements of NEPA. The State also appreciates the effort that BOEMRE took to update a number of the references cited. To address the missing information concern, BOEMRE adopted a methodology where each instance of an identified information gap was carefully examined based on tests in §1502.22 and regulations from the CEQ. This methodology allows BOEMRE to make conscious determinations for every statement it made about information gaps, considering whether the information gap is relevant, essential, or obtainable.

Generally speaking many of these instances simply are not relevant to the question at hand: whether to hold a lease sale and how much acreage to include in the sale. As exploration proceeds, so much more will be known about the Chukchi Sea planning area. Research has and continues to be conducted in this area.

In summary, the State concludes that the SEIS for Chukchi Lease Sale 193 provides more than sufficient support for the Secretary to affirm the February 6, 2008 Chukchi Lease Sale 193 and that it is well past time for lease holders to proceed to the next phase of exploration. Thank you for the opportunity to provide comments on this SEIS.

Sincerely,



Thomas B. Irwin
Commissioner

cc: Michael Bromwich, Director, Bureau of Ocean Energy Management, Regulation and Enforcement
John Goll, Regional Director, Bureau of Ocean Energy Management, Regulation and Enforcement
Randy Ruaro, Deputy Chief of Staff, Office of the Governor
John Katz, Director of State & Federal Relations, Office of the Governor
Kevin Banks, Director DNR, Division of Oil and Gas
Ed Fogels; Director, DNR, Office of Project Management and Permitting

Representative Elect Feige Comment

November 15, 2010

Mr. John Goll
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management,
Regulation and Enforcement (BOEM)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment

Dear Director Goll:

I am writing to you today to express my strongest support for immediate transmission of the Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea OCS Lease Sale 193 (Sale 193). Without a doubt, the extensive SEIS offers adequate data and analysis on which to make an informed decision regarding that critical lease. The SEIS not only specifically addresses the issues raised by the US District Court, but it does so in a comprehensive, scientifically defensible – and compelling manner.

Reasonable minds may disagree on the merits of drilling for oil and gas resources on Alaska's arctic OCS. There are impassioned and valid arguments on both sides of the issue. But such is always the case with natural resource development issues. For this hearing, therefore, it's critical to bear in mind that a decision regarding whether or not to affirm Sale 193 is not currently before you. The decision before you is merely whether or not the SEIS meets the mandates of the court and provides the baseline scientific and environmental data necessary for a reasonable decision to be made.

Undeniably, "perfect science" does not exist on this, or any other resource project. But equally undeniably, few projects have ever been subjected to the kind of regulatory scrutiny and stringent permitting requirements applied to Sale 193 and other Alaska OCS exploration projects. Without exaggeration, the requirements are some of the toughest safety and environmental standards found anywhere in the world. Activities here would be governed by the stringent lease stipulations identified in the FEIS and SEIS.

In addition, industry has complied with, met, and surpassed every regulatory and permitting requirement at every stage of this project to date. Industry has committed to unprecedented provisions for spill prevention and response. They have spent tens of millions on studies specific to these leases and conditions in the arctic. They have engaged in hundreds of meetings with local communities and stakeholders to hear their concerns and adapt their plans to ensure protection of Alaska's critical subsistence lifestyles. In short, they have done everything regulators have asked and everything in their power to make sure Alaska OCS exploration and development meets the highest safety, environmental and technological standards in the world and in doing so raises the bar for future oil and gas development.

Nevertheless, some will argue that we should not proceed with Sale 193 simply because we don't have "perfect information." They will argue that anything less than perfect knowledge creates too great a risk.



Representative Elect Feige Comment

Implicitly they suggest, that enlightenment can be gained through greater study, or merely through inaction. Human history and experience suggests otherwise.

Many of our country's greatest scientific achievements and technological breakthroughs have come about as a direct result of private sector experience gained in the field. It is only through doing that we can learn how to do things better. Moreover, Alaska's North Slope and OCS are already perhaps some of the most studied energy basins in the country. The shallow water geologic conditions here are substantially different and less dangerous than those encountered in the Gulf. And a forty-year, major incident free offshore development track record proves the technology already exists to safely develop Alaska's OCS.

But all of that is argument for another day. The only issue properly before you now is whether or not to allow the SEIS information to move forward so a decision on Sale 193 can be made. In the absence of specific omissions in the SEIS pursuant to the court order, the decision should be made to forward the SEIS immediately to the court for its consideration in order to keep the regulatory process moving.

Best Regards,



Eric A. Feige
Representative-elect
Co-Chair House Resources Committee
Alaska State Legislature

Routhier, Michael

From: Cathy Giessel [cathy@giessel.org]
Sent: Wednesday, November 10, 2010 4:49 PM
To: BOEMRE AK Public Comments
Subject: attn: Chukchi Sea Draft SEIS

Dear Sirs,

My name is Cathy Giessel, Alaska State Senator-elect, but, more importantly, a lifelong Alaskan. I was born in the Territory of Alaska and there are four generations of my family living in our state today. I have watched our economy change over the years from before statehood until now. The vibrant economy we currently enjoy is based on the development of our vast natural resources.

I am advocating that the OCS lease sale 193 be affirmed as held in 2008. Rescinding those leases would destroy Alaska's economy and Alaskans' future in this wonderful state.

I enjoyed hearing the testimony from my fellow Alaskans of native ancestry. I have spent several years working for the North Slope Borough School District and I am concerned about the future for the young people of our rural communities.

Presently the schools of the North Slope Borough (Point Hope, Point Lay, Wainwright, Barrow, Nuiqsut, Kaktovik, Atkasuk and Anaktuvuk) are wonderful facilities. The schools are well-staffed and supplied. All the schools have wireless internet in the buildings, with high school students issued new laptop computers. In fact, I can walk into any North Slope school, open my laptop, and in minutes I am connected to the internet. The schools are community centers for evening activities for the whole community, in the gym and library. Several of the schools even have swimming pools. All of this educational opportunity is funded by petroleum tax revenues to the North Slope Borough.

After graduation, these rural students have the opportunity to pursue jobs in resource development close to home on the North Slope. These are good paying jobs, in a place where jobs are limited. The income brought home from resource development jobs benefit the entire community by injecting revenue into their economy.

Alaskans, present and future, need these valuable jobs.

I strongly support affirmation of the OCS Lease Sale 193.

Respectfully,

Cathy

Cathy Giessel, MS, ANP, FAANP
 Senator-elect, Alaska Senate District P

12701 Ridgewood Rd
 Anchorage, AK 99516

cathy@giessel.org

1/11/2011

Alaska State Legislature



November 29, 2010

John Goll
 Regional Director, Alaska OCS Bureau
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska, 99503-5820

Attn: Chukchi Sea Draft SEIS

Dear Mr. Goll,

I strongly support affirmation of Lease Sale 193 as held in 2008. I urge you to eliminate any further delays in allowing lease holders to develop Chukchi Sea interests. Companies paid top dollar for their Chukchi Sea leases in 2008, with the full expectation that the federal government would allow development already deemed in the best interests of Alaska and of the nation. Delays - including rescinding leases - discourage crucial new industry investment in Alaska.

Alaskan OCS development is critical to the state's economic health. Delays are costing real jobs and generally discouraging investment in the face of growing uncertainties and higher risks. With eventual development - if plans meet the most stringent environmental and regulatory standards - Alaska's rich OCS reserves may drive 35,000 additional jobs, annually, over 50 years, and would generate an estimated \$72 billion in new payroll. Tapping into those 27 billion barrels of oil and 132 trillion cubic feet of natural gas would secure Alaska's economic health through a new generation of support industries, jobs and modest tax revenues, while funneling billions into the federal treasury.

The United States already imports more than 60 percent of its oil, refusing to tap extraordinarily rich resources within its own bounds. This risks financial and political security in a global game of prices and production, manipulated by foreign leaders in direct competition with the private sector oil and gas interests based here at home. If there ever was a time to promote responsible, active drilling, it is now.

We can, as numerous projects and companies have demonstrated, produce resources without compromising the environment and subsistence lifestyles prized in Alaska. I urge prompt approval of Chukchi Sea lease development, and affirmation of the 2008 Lease Sale 193, an action clearly supported by BOEMRE's supplement to the EIS.

Sincerely,

Representative Mike Hawker
 House Finance Committee Co-Chairman
 Alaska State Legislature, House District 32

Rep.Mike.Hawker@legis.state.ak.us • <http://www.akrepublicans.org/hawker/>

Alaska State Legislature

Chairman
 State Affairs Committee

Member
 Judiciary Committee
 Labor & Commerce Committee
 Health & Social Services Committee
 Military & Veterans Affairs Committee

Finance Subcommittees
 Labor and Workforce Development
 Military and Veterans' Affairs
 Public Safety



A Communication From
REPRESENTATIVE BOB LYNN
 District 31 Anchorage

E-Mail: Representative_Bob_Lynn@legis.state.ak.us
"Bob Lynn's Alaska Blog" www.RepLynnBlog.com

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November 29, 2010

John Goll, Regional Director
 Alaska OCS Region
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS - Allow Responsible Access to Alaska's Resources

Dear Mr. Goll:

I strongly support resource development in Alaska including the development of oil and gas in the Chukchi Sea. As you are aware, drilling in the Chukchi Sea is very different than drilling a deep water well in the Gulf of Mexico. We have the technology and expertise required to safely extract oil and gas without harm to the environment or wildlife. I urge you to lift the de facto moratorium in the Chukchi Sea for the good of Alaska and our nation.

Thank you for consideration.

Sincerely,

Representative Bob Lynn
 Alaska State House of Representatives

October 28, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS – Support of Local Energy Resource Development

Dear Mr. Goll:

Please accept this letter in support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska. As a representative of local government in California, I believe that the development of local energy resources is critical to local, state and national economic development efforts. I am hopeful that the federal government will finally approve the responsible development of the Chukchi's abundant oil and natural gas resources as well as others throughout the country.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. I am in support of large-scale local projects that have the potential to fuel growth and stability for the long term.

In my opinion, the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,



Regan M. Candelario
City Administrator
City of Gadalalpe

1284 Sydney Street, San Luis Obispo, CA 93401

Mayor Northwest Arctic Borough Comment
NORTHWEST ARCTIC BOROUGH
P.O. BOX 1110
KOTZEBUE, ALASKA 99752
(907) 442-2500 / FAX (907) 442-2930

November 29, 2010

John Goll
Region Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Subject: Chukchi Sea Draft SEIS Comments
Submitted by email: BOEMREAKPublicCommen@boemre.gov

Dear Mr. Goll:

The Northwest Arctic Borough Administration (NWAB) submits these comments on the September 2010 draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193. The NWAB believes the SEIS did not adequately address missing information, and it urges the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) to develop a comprehensive interagency research plan before issuing the final SEIS. The research plan would identify what information is needed for the lease sale, exploration and development phases and use a coordinated approach among agencies and industry to obtain this information.

On October 12, 2010, the Alaska Region of the BOEM released the draft SEIS in response to a June ruling by the U.S. District Court that the environmental analysis for Lease Sale 193 was inadequate. The order required the BOEM to address three subjects: Complete an analysis of the environmental impact of natural gas development, determine whether missing information identified by BOEM in the 193 FEIS was essential or relevant under 40 CFR 1502.22, and determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

While most of our comments address outstanding information needs, the NWAB is also concerned about the *significance thresholds* outlined in Section IV.A.1 of the SEIS. The thresholds for determining significant impacts are too high. For example, an impact to a marine mammal would not be considered significant unless it took 3 or more generations for a population to recover to its former status. An impact to subsistence harvest would not be considered significant unless subsistence resources were "unavailable, undesirable for use, or

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Mayor Northwest Arctic Borough Comment

John Goll
November 29, 2010
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available only in greatly reduced numbers for a period of 1-2 years" (p. 60). For the people of this region, impacts to fish and wildlife and subsistence would be significant at much lower levels.

The NWAB urges BOEM to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife and the people who live in this region. The analyses in the original FEIS notes hundreds of areas in which information was missing.

In response to the court mandate, the draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice, and that no matter what impacts might result, it would allow drilling to proceed. Appendix A of the Lease Sale 193 SEIS summarily dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife. The SEIS implies that since there will always be incomplete information, the missing information is not necessary at the lease sale stage. Nowhere in Appendix A, however, does the BOEM explain why existing information is sufficient for making decisions among the alternatives.

The SEIS repeatedly states that more information will be required at the exploration and development phases, but it does not indicate what specific information will be needed at those phases. The NWAB is concerned that few information gaps will be filled during reviews of exploration projects, especially considering the 30-day requirement for BOEM to make a decision on a proposed exploration plan. During review of Shell's Chukchi Sea exploration plan, there was little emphasis on filling information gaps. In addition, Shell's exploration plan dismissed a large oil spill as not being reasonably foreseeable. Considering the recent oil spill in the Gulf of Mexico occurred during the drilling of an exploration well, it is important that the BOEM specify exactly what information gaps it identified in the FEIS that will be filled during the exploration phase.

The BOEM's decision to release the draft SEIS without acknowledging the need to fill information gaps goes against science-based decision-making, especially in light of the systemic failures made evident by the *Deepwater Horizon* accident. New information about oil spill response capabilities should be incorporated into the SEIS. The original FEIS was developed on historic spill data from the Gulf of Mexico and incorrect assumptions about the capability of responding to a large spill. Considering only about 25 percent of the oil from the *Deepwater Horizon* blowout was removed by mechanical means, assumptions for oil recovery in the

Mayor Northwest Arctic Borough Comment

John Goll
November 29, 2010
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Chukchi Sea need to be revised. The extreme conditions in the Arctic and distance from infrastructure would make it difficult to recover oil from a large oil spill, especially under adverse weather conditions. In addition, considering it took 4.5 months to complete the relief well for the *Deepwater Horizon*, a spill occurring late in the drilling season in the Chukchi would mean a relief well would need to be drilled throughout the harsh Arctic winter.

Since issuing the FEIS, the agency knows what specific locations of the planning area have been leased. This knowledge makes it more feasible to fill information gaps for this lease sale.

We must be thoughtful and responsible in developing offshore resources in Alaska so that we protect the pristine fisheries, wildlife, and subsistence way of life for generations to come. In the Arctic, we must continue to be guided by science and the voices of Northwest Arctic and North Slope communities as we chart a wise path forward.

The process for development of oil and gas resources in the Alaska Outer Continental Shelf (OCS) should recognize the need to fill information gaps before leasing proceeds. The fact that there will always be additional information needs should not be a reason to proceed without obtaining essential information. The NWAB believes a precautionary approach, such as the one used by the North Pacific Management Council for the Arctic fisheries, provides a model for oil and gas development. The August 2009, *Fishery Management Plan for the Fish Resources of the Arctic Management Area* found that commercial fishing in Alaska's Arctic waters should not proceed until more information is available to support sustainable fisheries management.

Instead of proceeding with the current draft SEIS, the NWAB requests BOEM first develop a complete plan for fulfilling information needs. The plan should put a priority on collecting essential missing information and what level of information is necessary at the lease sale, exploration, and development phases. The plan should be based in part on the data generated by the ongoing United States Geological Survey analysis of Arctic oil and gas activities due out in spring 2011. Before making any final decisions, the agency should prepare a revised draft SEIS, followed by public review and comment.

BOEM's first priority must be to protect the people of the Northwest and North Slope boroughs whose survival is directly linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

John Goll
November 29, 2010
Page 4

The NWAB appreciates this opportunity to submit comments on the SEIS, and we look forward to working with the BOEM in the future on activities in the Outer Continental Shelf.

Sincerely,

Siikauraq Martha Whiting
Mayor

NORTHWEST ARCTIC BOROUGH

P.O. Box 1110
Kotzebue, Alaska 99752
(907) 442.2500 or (800) 478.1110
Fax: (907) 442.3740 or 2930

November 30, 2010

John Goll, Region Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Subject: Chukchi Sea Draft SEIS Comments
Submitted by email: BOEMREAKPublicCommen@boemre.gov

Dear Mr. Goll:

The Northwest Arctic Borough (NWAB) submits these comments on the September 2010 draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193. Overall, the NWAB believes the SEIS did not adequately address missing information, and we urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) to develop a comprehensive interagency research plan before issuing the final SEIS. The research plan should identify what information is needed for the lease sale, exploration and development phases and use a coordinated approach among agencies and industry to obtain this information.

While most of our comments address outstanding information needs, the NWAB is also concerned about the significance thresholds outlined in Section IV.A.1 of the SEIS. The thresholds for determining significant impacts are too high. For example, an impact to a marine mammal would not be considered significant unless it took 3 or more generations for a population to recover to its former status. An impact to subsistence harvest would not be considered significant unless subsistence resources were "unavailable, undesirable for use, or available only in greatly reduced numbers for a period of 1-2 years" (p. 60). For the people of this region, impacts to fish and wildlife and subsistence would be significant at much lower levels.

The NWAB urges BOEM to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and respect for Arctic people who live in this region and depend upon the wildlife for culture and subsistence. Note, the analyses in the original FEIS notes hundreds of areas in which information was missing.

In response to the court mandate, the draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice, and that no

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matter what impacts might result, it would allow drilling to proceed. Appendix A of the Lease Sale 193 SEIS summarily dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife. The SEIS implies that since there will always be incomplete information, the missing information is not necessary at the lease sale stage. Nowhere in Appendix A, however, does the BOEM explain why existing information is sufficient for making decisions among the alternatives

The SEIS repeatedly states that more information will be required at the exploration and development phases, but it does not indicate what specific information will be needed at those phases. The NWAB is concerned that information gaps will be filled during reviews of exploration projects, especially considering the 30-day requirement for BOEM to make a decision on a proposed exploration plan. During review of Shell's Chukchi Sea exploration plan, there was little emphasis on filling information gaps. In addition, Shell's exploration plan dismissed a large oil spill as not being reasonably foreseeable. Considering the recent oil spill in the Gulf of Mexico occurred during drilling of an exploration well, it is important that the BOEM specify exactly what information gaps it identified in the FEIS will be filled during the exploration phase.

The BOEM's decision to release the draft SEIS without acknowledging the need to fill information gaps goes against science-based decision-making, especially in light of the systemic failures made evident by the *Deepwater Horizon* accident. New information about oil spill response capabilities should be incorporated into the SEIS. The original FEIS was developed on historic spill data from the Gulf of Mexico and incorrect assumptions about the capability to respond to a large spill. Considering only about 25 percent of the oil from the *Deepwater Horizon* blowout was removed by mechanical means, assumptions for oil recovery in the Chukchi Sea need to be revised. The extreme conditions in the Arctic and distance from infrastructure would make it difficult to recover oil from a large oil spill, especially under adverse weather conditions. In addition, considering it took 4.5 months to complete the relief well for the *Deepwater Horizon*, a spill occurring late in the drilling season in the Chukchi would mean a relief well would need to be drilled throughout the harsh, Arctic winter.

Since issuance of the FEIS, the agency knows what specific areas of the planning area have been leased. This knowledge makes it more feasible to fill information gaps for this lease sale.

We must be thoughtful and responsible in developing offshore resources in Alaska so that we protect the pristine fisheries, wildlife, and subsistence way of life for generations to

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come. In the Arctic, we must continue to be guided by science and the voices of Northwest Arctic and North Slope communities as we chart a wise path forward.

The process for development of oil and gas resources in the Alaska Outer Continental Shelf (OCS) should recognize the need to fill information gaps before leasing proceeds. The fact that there will always be information needs should not be a reason to proceed without obtaining essential information. The NWAB believes a precautionary approach, such as the one used by the North Pacific Management Council for the Arctic fisheries, provides a model for oil and gas development. The August 2009, *Fishery Management Plan for the Fish Resources of the Arctic Management Area* found that commercial fishing in Alaska's Arctic waters should not proceed until more information is available to support sustainable fisheries management.

Instead of proceeding with the current draft SEIS, the NWAB requests BOEM first develop a complete plan for fulfilling information needs. The plan should put a priority on collecting essential missing information and what level of information is necessary at the lease sale, exploration and development phases. The plan should be based in part on the data generated by the ongoing United States Geological Survey analysis of Arctic oil and gas activities due out in spring 2011. Before making any final decisions, the agency should prepare a revised draft SEIS, followed by public review and comment.

BOEM's first priority must be to protect the people of the Northwest and North Slope Boroughs whose survival is directly linked to the Chukchi Sea and Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

The NWAB appreciates this opportunity to submit comments on the SEIS, and we look forward to working with the BOEM in the future on activities in the Outer Continental Shelf.

Sincerely,

Ukallaysaq Tom Okleasik, Planning Director

Cc: Siikauraq Whiting, Mayor
Alagiaq Grant Hildreth, Deputy Planning Director
Kill'aq John Chase, Community Planner and Coastal Area Specialist
Dan Forester, Planning Director North Slope Borough

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Edward S. Itta, Mayor

November 30, 2010

John Goll
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Submitted via e-mail at: BOEMREAKPublicCommen@boemre.gov

Re: Draft Supplemental EIS for Chukchi Sea OCS Lease Sale 193

Dear Director Goll:

The North Slope Borough (Borough) appreciates this opportunity to comment on the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Alaska Region's Draft Supplemental Environmental Impact Statement (DSEIS) for Chukchi Sea Outer Continental Shelf (OCS) Lease Sale 193.

As you are well aware, it is the Borough's position that leasing and oil and gas industry operations should not be permitted in the Chukchi Sea. This position is based on our strong and continuing beliefs that the risk of a significant oil spill cannot be eliminated, that the capability does not exist to effectively respond to such a spill in our remote and challenging environment, and that too little is known about this ecosystem and the potential impacts to its resources—either from a cataclysmic spill or from routine operations—to credibly balance the potential risks against the projected benefits.

The DSEIS provides inadequate justification for moving forward without a credible assessment of the true risks posed by arctic OCS leasing and operations. There remains a widespread lack of critical baseline environmental information—information that is essential and relevant to the decisions which the agency is charged with making at this lease sale phase. This information is needed not for the sake of collecting information, but to protect the future of people who are both part of and dependent upon the Chukchi Sea ecosystem.

Our comments will first address deficiencies in the methodology of the DSEIS analysis. We then consider the depth, breadth, and cumulative significance of what BOEMRE does not know.

Next, we discuss additional analysis still lacking in the document, including the need for an expanded human health impact assessment. Finally, we suggest a slightly revised timeline for drafting of the Final SEIS. This will enable BOEMRE to better identify and address potential risks associated with the critical lack of data to support responsible decision making, and therefore better comply with the order of the District Court.¹

A. DEFICIENCIES IN DSEIS ANALYSIS

Appendix A of the DSEIS provides an analysis of individual statements from the 193 FEIS that identify incomplete or unavailable information. We are told that the analysis "comprehensively addresses each item of incomplete or unavailable information." The methodology used in the analysis is briefly described as follows:

...information was considered *relevant* if it could be connected to reasonably foreseeable significant adverse impacts as stipulated by CEQ regulation and following the significance criteria described for each resource in the 193 FEIS. All statements indicating relevant incomplete or unavailable information that would be relevant were then evaluated to determine whether the information was *essential* to a reasoned choice among alternatives. To be essential, the information must provide a means for making a clear distinction between two or more alternatives. Lastly, if missing information was determined to be relevant and essential, managers evaluated the potential means of obtaining the information to determine whether cost would be *exorbitant*.²

This entire approach is problematic in several respects, both in terms of its logical construction, and its implementation.

1. Focus on Individual Statements Ignores Data Gaps in these Statements

By focusing only on each individual statement, the analysis avoids acknowledging the sheer weight of all of the information not known that, taken as a whole, reveals a poorly understood ecosystem and poorly understood potential impacts. Small data gaps, which individually may be dismissed as not greatly significant, can through their interrelatedness and accumulation present significant risks. And small data gaps are critical in light of the almost total lack of information on the use of the Chukchi Sea by most marine mammal species.

BOEMRE explains its reason for ignoring particular scientific data as follows:

...some information is simply not of a type that would alter scientific judgments or affect decision-making. Some information simply is not significant or relevant enough to be considered essential to a reasoned decision among alternatives. For example, additional information about the winter food habits of a whale that is

¹ *Native Village of Point Hope v. Salazar*, No. 1:08-cv-00004-RRB (D. Alaska), Order dated July 21, 2010, as amended Aug. 5, 2010, and Sep. 2, 2010.

² DSEIS, Appendix A, p. 1 [emphasis in original].

only present within the action area during summer months may not be significant or relevant enough to be considered essential to a reasoned decision among alternatives.³

It is our belief that, precisely because little is known about whale numbers, distribution, and behavior in the Chukchi Sea "action area" during the summer months, more attention should be paid to the animals' habits elsewhere during other times of the year (including food habits and any stresses to those habits that the population maybe experiencing). Given what is known about the rapidly and unpredictably changing arctic and sub-arctic marine environments, it is reasonably foreseeable that whales may be experiencing stresses throughout their migratory range. This must be considered in assessing the wisdom of permitting additional activities that have the potential to further affect the population.

We ask that BOEMRE consider for each resource and conflicting use the totality of what it knows and does not know. The agency should, on a case-by-case basis, determine whether it can credibly say that projected activities can be conducted in a manner that does not significantly impact each wildlife resource, environmental value, or use.

The agency's inability to identify specific impacts should not lead it to conclude that there are no impacts. In our many years of reviewing lease sale documents, we have seen this BOEMRE's predecessor agency employ this flawed reasoning all too often.

We remind you of comments made by then President-elect Obama in his December 17, 2008 weekly radio address taking a bold stand for making decisions based on science and facts rather than ideology as he introduced leading members of his science and technology team. "The truth is that promoting science isn't just about providing resources—it's about protecting free and open inquiry," President-elect Obama said. "It's about ensuring that facts and evidence are never twisted or obscured by politics or ideology. It's about listening to what our scientists have to say, even when it's inconvenient—especially when it's inconvenient. Because the highest purpose of science is the search for knowledge, truth and a greater understanding of the world around us. That will be my goal as President of the United States..."

2. Range of Alternatives is Inadequate

BOEMRE's acknowledgement of just how much it does not know about Chukchi Sea resources and values renders the agency's identification of alternatives, against which the importance and relevance of missing information is measured, defective as a means of ensuring that effects to those resources and values can be avoided, minimized, or mitigated.

A coalition of conservation organizations discussed the improper framing of Sale 193 alternatives in an October 27, 2010 letter to Secretary Salazar and BOEMRE Director Bromwich:

³ *Id.* at p. 3.

Missing information about the basic biology of the region and about the effects of oil and gas activities on the species that inhabit it is essential to a reasoned choice among the alternatives actually proposed in the original EIS. It is also essential to framing an appropriate range of alternatives in the first place. BOEMRE's Alaska Region concludes in the draft SEIS that the effects under all the action alternatives presented in the original EIS are basically the same . . . This conclusion suggests that the range of alternatives is inadequate. The basic information about the Chukchi Sea ecosystem that the Alaska Region concedes is missing and concedes is, in many instances, relevant to potentially significant effects from the lease sale, is essential to proposing a meaningful range of alternatives that would have meaningfully different effects on the environment.⁴

We strongly agree with this assessment. We ask that BOEMRE reframe DSEIS alternatives based on the admittedly incomplete available science within the framework of a conservative precautionary approach designed to avoid adverse impacts where they cannot be reliably quantified or qualified due to a lack of available information.

The Council on Environmental Quality (CEQ) refers to the alternatives analysis section as the "heart of the environmental impact statement."⁵ CEQ regulations require agencies to present the environmental impacts of the proposal and the alternatives in comparative form, "thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public."⁶ Yet the alternatives in the Sale 193 EIS are defined without reference to a clear and scientifically grounded baseline of ecosystem information. They are therefore not based on sharply differing levels of impacts and associated risks to resources and competing uses, and there is no clear basis for choice among them.

B. SIGNIFICANCE OF THE MISSING INFORMATION

1. Need to Consider Information at this Stage

Decisions made as a result of a lease sale planning process are consequential in that they determine whether, when, where, and under what conditions to issue leases in a particular OCS region. Information concerning the resources in the area and the effects of oil and gas activity on those resources is essential to making those critical leasing decisions.

On September 16, 2009, more than 400 Ph.D.-level scientists signed a letter to President Obama as Secretary Salazar was taking comments on a proposed interim 5-year OCS Leasing Program. The Secretary was in part considering what level of offshore oil and gas activity to allow in the Chukchi and Beaufort Seas. The scientists cited the changes taking place and urged the President

⁴ Letter from Alaska Wilderness League, et al., to Secretary Salazar and Director Bromwich Re: Pending Decisions in the Arctic Ocean: Chukchi Sea Lease Sale 193 Remand and Shell Oil Company's Beaufort Sea Exploration Drilling Plan for 2011 (Oct. 27, 2010).

⁵ 40 C.F.R. 1502.14.

⁶ *Id.*

to take a time out from offshore industrial activity to allow for a precautionary, science-based approach that better assesses the consequences of development in a rapidly changing ecosystem:

We believe that the environmental impacts of oil and gas development in the waters of the U. S. Arctic are not adequately assessed and cannot yet be accurately predicted . . . Before offshore oil and gas development can take place safely and appropriately, we must have a better understanding of the ecosystem, adequate consultation with Alaska residents in the Arctic about their needs and concerns, and adequate prevention, mitigation, and response capacity and measures.

As scientists, we urge the President of the United States and his administration to take a science-based precautionary approach on decisions regarding the offshore oil and gas development of the U.S. Arctic Ocean. Prior to permitting any new oil and gas development, there must be thorough research, sustained monitoring, and comprehensive planning to better understand and avoid impacts and determine the best way to proceed in the U.S. waters of the Chukchi and Beaufort Seas.⁷

The DSEIS does not acknowledge or address the concerns and recommendations of these scientists. Its conclusion that "while many items of incomplete, missing, or unavailable information were broadly relevant to the important issues at hand, none were essential for a reasoned choice among alternatives" begs credibility and suggests a pro forma effort to comply with the order of the U.S. District Court to determine whether missing information identified in the Sale 193 FEIS was essential or relevant under 40 C.F.R. 1502.22.

A lease sale involves concrete and consequential decisions that by law and by practice greatly enhance the likelihood that future oil and gas activities will be permitted. In no small measure, as we have seen in recent years, lessees have the capability to bring considerable pressure on agencies, mount public relations campaigns, and otherwise marshal substantial resources and information far beyond the capabilities of decision makers, other stakeholders, and the public to support their desired offshore operations. Good, reasonably complete, and credible information about the biological functions of different parts of the planning area, and the relative importance and interconnectedness of those parts to the regional ecosystem as a whole, are essential to leasing decisions. Similarly, a reasonably complete understanding of the potential effects of industrial activities, alone and in combination with other foreseeable activities and forces, on different components of the ecosystem is essential in deciding whether, where, when, and under what conditions those activities should be permitted.

2. Same Information Gaps in DSEIS and FEIS

Our comments today are similar to those we and others submitted during the development of the original EIS. We are concerned that the DSEIS has come no closer to a thorough, reasoned

⁷ Letter from Gabriela Chavarria, et al. to the President (Sep. 16, 2009) available at http://www.pewtrusts.org/uploadedfiles/wwwpewtrustsorg/News/Press_Releases/Protecting_ocean_life/Scientists%20Letter%20to%20the%20President_Sept%202017.pdf [citations omitted].

analysis than the Draft (DEIS) and Final Sale 193 EIS (FEIS) documents that BOEMRE was required to supplement.

In the DSEIS, BOEMRE concedes that much of the information identified as missing in the Sale 193 EIS was relevant to potentially significant effects of the lease sale. The agency concludes, however, that none of the missing information is essential to reasoned choices among alternatives, and thus there is no obligation to obtain the information.⁸ This of course echoes the conclusions reached in the Final 2007 EIS.

We could not disagree more. The missing information concerns the most basic details concerning the abundance, distribution, and life history characteristics for most marine mammal and other upper trophic level species occurring in the region. There is a near total lack of information concerning lower trophic level species, and no assessment of the potential impacts of industrial activities on these critical components of the Chukchi Sea ecosystem.

In our comments on the DEIS, we set out a compelling basis for our assertion that the range of alternatives was inadequate. But rather than respond to our points, the Mineral Management Service (MMS) simply stated that it disagreed with our conclusion.⁹ No additional or modified alternatives were presented in the FEIS. With the exception of the added and narrow gas development scenario, none are included in the DSEIS that reflect the absence of essential information and adopt an appropriately cautious approach to leasing.

In the FEIS, BOEMRE avoids consideration of nearby projects as follows:

At present, no process is in place to acquire meaningful information regarding Russian commercialization and industrialization in the high Arctic. While MMS acknowledges the existence of various industrial activities, these activities are not well understood and, as a result, fall into the speculative category of activity as defined in Section V of this EIS.¹⁰

As we pointed out in our comments on the FEIS, information is readily available concerning large-scale oil and gas development at Russia's Sakhalin Island. The details of the project, and the challenges it has and continues to face, have been extensively reported in the industry and general press. Shell's website describes that company's involvement on Sakhalin. Thousands of other references are identifiable through a simple web search. Industrial operations in adjacent Russian waters are clearly relevant and essential to a credible cumulative effects analysis considering oil and gas leasing in the Alaskan Chukchi Sea, yet BOEMRE has still made no attempt to gather readily available information.

To adequately respond to the Court's order, BOEMRE must expand its definitions of what information is essential and relevant to include information on all effects producing activities and

⁸ See DSEIS at p. 10.

⁹ MMS Responses to North Slope Borough Comments, response to NSB 006-001 available at http://alaska.boemre.gov/re/FEIS%20EA/Chukchi_FEIS_193/Vol%20II%20Sec%202%20WEB.pdf

¹⁰ *Id.*, response to NSB 006-006.

forces that have the potential to act upon the resources and uses of the planning area. Particularly with respect to potential cumulative effects, an understanding of exposures and stresses throughout the ranges of migratory species is relevant to assessing their vulnerability to potential additional effects associated with oil and gas activities within the planning area. We ask BOEMRE to adopt a more common sense approach to identifying essential and relevant information, be more proactive in obtaining the information that does exist, be more assertive in setting priorities and imposing conditions that will lead to the securing of missing information, and adopt a cautionary approach to leasing and project permitting until sufficient information is available for responsible decision making.

3. New Information and Circumstances to Consider

We strongly believe that BOEMRE must consider new information and circumstances that have arisen since the FEIS was prepared more than three years ago. With so little known about the Chukchi Sea ecosystem, consideration of new information becomes all the important to leasing decisions.

Under the National Environmental Protection Act (NEPA) and its regulations, such new information would have triggered a supplemental EIS (regardless of what the court order requires).¹¹ NEPA also requires that an agency use "high-quality information and accurate scientific analysis."¹² An agency cannot rely on "outdated data" or fail "to acknowledge the limitations in a methodology."¹³

Although new and relevant reports regarding bowhead whales in the Chukchi Sea have been released since the issuance of the FEIS, the DSEIS does not consider them.¹⁴ We urge you to consider an important finding of these reports: **the majority of bowhead whales in the Western Arctic stock migrate through the Lease Sale 193 area.** This information is available, is relevant to and would seem to contradict key conclusions reached in the FEIS and DSEIS, but has yet to be considered by BOEMRE.

The results of these studies, their implications with respect to potential impacts to bowhead whales and other resources associated with Sale 193 related activities, and the failure of BOEMRE to appropriately acknowledge and analyze them are discussed in detail in comments on the DSEIS to be submitted by the Alaska Eskimo Whaling Commission (AEWC). We share

¹¹ A supplemental EIS must be prepared when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(ii). When new information related to an EIS comes to light, the agency must take a "hard look" at whether the new information is significant to the environmental impact analysis. *N. Idaho Cmty. Action Network v. United States DOT*, 545 F.3d 1147, 1154-1155 (9th Cir. 2008) (citing *Price Road Neighborhood Ass'n v. U.S. Dep't of Transp.*, 113 F.3d 1505, 1510 (9th Cir. 1997)). If the new information may give rise to significant environmental impacts "in a manner not previously evaluated and considered," the agency must conduct a SEIS. *Id.* at 1157.

¹² 40 C.F.R. § 1500.1(b); *Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005).

¹³ *Nw. Ecosystem Alliance v. Rey*, 380 F. Supp. 2d 1175, 1195 (W.D. Wash. 2005).

¹⁴ See, e.g., ADFG, et al. Satellite Tracking of Western Arctic Bowhead Whales (July 2010) (DOI/BOEMRE is listed as the funding agency); Quakenbush, et al. Fall and Winter Movements of Bowhead Whales in the Chukchi Sea (2009); and NMFS's July 2010 Biological Opinion for Oil and Gas Activities in the Beaufort and Chukchi Seas.

AEWC's concerns regarding the failure of BOEMRE to analyze new bowhead whale information. We question why the agency has chosen to include in the DSEIS new information on other species, while not including bowhead data that is arguably more central to subsistence concerns.

C. NEED FOR ADDITIONAL EXPANDED ANALYSIS

The District Court in part ordered BOEMRE to analyze the environmental impact of natural gas development. But the DSEIS does not expand the human health impact analysis of the Sale 193 EIS. To the extent that the assessment of the potential impacts of gas development is new and additional analysis in the DSEIS, it requires an expansion of the human health impact analysis

The North Slope Borough, our communities, and individual residents have long been concerned about the potential human health impacts from potential oil and gas exploration, development, and production activities. These concerns include air quality issues and subsequent increases in respiratory problems, contamination of subsistence resources through water and air pollution, displacement and impairment of access to subsistence resources and associated food insecurity, and social issues associated with increased contact with non-resident industrial workers. BOEMRE is obligated by NEPA,¹⁵ by Executive Order 12898,¹⁶ and by subsequent guidance from the Council on Environmental Quality to assess possible human health impacts. A commitment to perform this required assessment at the lease sale planning phase was made in the 2007-2012 OCS Leasing Program. We remind you that the assessment is not itself the required objective. It is but a means of identifying potential health related impacts. The legal mandate then is to attempt to mitigate those identified potential impacts.

Neither the FEIS nor the DSEIS adequately recognizes and addresses as a component of its cumulative effects analysis the likely long-term impacts on human residents of the increased industrialization of the Arctic. There are numerous studies funded by the petroleum industry and others concluding that many potential impacts to wildlife can be mitigated to varying degrees. We are unaware, however, of any comparable literature identifying an adequate and proven approach to mitigating impacts on subsistence activities.

The FEIS referred to a wide array of potential human health impacts associated with Sale 193 leasing and the cumulative case, and included some analysis of these impacts provided to the agency by the Borough. Public health issues were mentioned in the "sociocultural" impacts and "environmental justice" discussion, yet there was not an effort to systematically and thoroughly address human health concerns separately in the document.

The DSEIS neither corrects these deficiencies nor provides any meaningful analysis of potential human health effects associated with gas development alone, or with other potential development and factors that may cumulatively impact the health of our people. Nor does the DSEIS identify any potential mitigation measures to address those impacts.

¹⁵ See, e.g., 42 U.S.C. 4331(b)(2); 40 C.F.R. 1508.8, 1508.14;

¹⁶ See Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (Feb. 11, 1994) at 1-101, 3-301.

BOEMRE is legally and ethically required to include a rigorous, systematic assessment of human health impacts in its NEPA analyses, and to identify strategies to mitigate identified potential impacts.

D. ENVIRONMENTAL JUSTICE

Federal agencies must "make achieving environmental justice part of ... [their] mission[s]" pursuant to Executive Order 12898.¹⁷ It has been troubling to hear some of the consistent themes of comments and testimony offered to date by industry stakeholders, the State of Alaska, and the Municipality of Anchorage, among others, concerning the Sale 193 DSEIS. They have spoken repeatedly of the great resource potential of the arctic OCS, the need to reduce the nation's dependence on foreign sources of oil, the jobs that would be generated, and the revenues that will be received at the state level. They have said that in light of these considerable benefits, the risks are worth taking.

First, we believe that it is always wise when fantastic resource estimates are offered as justification for industrial expansion into a frontier area to remember that they are largely speculative. It is somewhat ironic that during this Lease Sale 193 comment period the estimate of recoverable oil within the National Petroleum Reserve-Alaska, once heralded to hold over 10 billion barrels, was dramatically downgraded to less than one billion barrels.

Second, our nation's dependence on foreign oil would annually be reduced by only single-digit percentage points even if the wildly optimistic estimates of recoverable volume prove accurate. The jobs figures quoted are misleading. Only a fraction would be the direct oil industry positions implied, and it is likely that many of those slots would be filled by workers not now residing in Alaska. And yes, it is true that the State would receive considerable revenue from oil transported through the Trans-Alaska Pipeline System. The Borough also would receive some measure of revenue from taxes on industrial facilities constructed onshore and in state waters, and perhaps funds from the Coastal Impact Assistance Program if it is continued into the distant future.

That all being said, it is clear that the great majority of any benefits associated with Chukchi Sea OCS leasing, exploration, development, and production will be realized not by the Borough and our residents, but by companies, agencies, organizations, and workers elsewhere. The great majority of the risks, however, will be borne by our people, and our social and cultural institutions and systems. That imbalance in benefits and risks is exactly what environmental justice requirements were created to identify and avoid. But the DSEIS fails to meaningfully assess the potential environmental justice implications of Lease Sale 193.

Here too, the unavailability of critical relevant information, and the framing of alternatives that do not provide clear choices defined by levels of potential impacts and risks, confounds any attempt to meaningfully assess the potential threats of this sale to our people.

¹⁷ *Id.* at 1-101.

This is true with respect to the myriad of potential impacts to marine resources and subsistence associated with both routine industrial operations and oil spills. Given the extraordinarily harsh regional weather and ice conditions of the Chukchi Sea, its remoteness from existing industrial and emergency response infrastructure, and the failure of the oil industry to demonstrate the capability to effectively respond to a major oil spill under conditions elsewhere that are far less challenging all speak to a significant, yet unacceptably unquantifiable risk to the Chukchi Sea ecosystem and to those of us who depend on the resources of this region for our physical health and cultural and social well being.

E. ALASKA COASTAL MANAGEMENT PROGRAM REVIEW

In 2007, BOEMRE prepared a consistency determination for Lease Sale 193 pursuant to the Alaska Coastal Management Program (ACMP) and the Coastal Zone Management Act. Given that the District Court's order to assess the potential impacts of gas development is new requirement calling for assessment beyond that of the original EIS, BOEMRE must prepare and submit to the State of Alaska a revised consistency determination reassessing the consistency of Lease Sale 193 with ACMP.

The requirement for a supplemental consistency determination is set forth in 15 C.F.R. § 930.46 (Supplemental coordination for proposed activities):

(a) For proposed Federal agency activities that were previously determined by the State agency to be consistent with the management program, but which have not yet begun, Federal agencies shall further coordinate with the State agency and prepare a supplemental consistency determination if the proposed activity will affect any coastal use or resource substantially different than originally described. Substantially different coastal effects are reasonably foreseeable if:

...

(2) There are significant new circumstances or information relevant to the proposed activity and the proposed activity's effect on any coastal use or resource

...

Here, a new component, a gas development scenario, has been added to the range of activities projected to result from the lease sale. Also, given how little is known about the presence, distribution, and use within the sale area of most marine mammals, fish, and other resources, any new information must be seen as significant and relevant. There is new information, and, as discussed above, BOEMRE has an independent obligation under NEPA to consider the new information and circumstances that have arisen since the FEIS was prepared. With the requirement to consider this new information comes a need for supplemental coordination with the State of Alaska concerning the consistency of Lease Sale 193 with the ACMP.

F. MORE TIME WILL IMPROVE FINAL SEIS

The interests of all stakeholders would be served by allowing BOEMRE just a few more months to prepare and publish the Final SEIS. The District Court's order required the agency to make

reasonable efforts to respond to the issues raised on remand by January 21, 2011, and to file a report with the Court outlining the status of the matter if the deadline proves unrealistic. We recognize that BOEMRE intends to finalize the SEIS by January 21, 2011, but believe that if the agency articulates a legitimate reason, there is room for extending the deadline. We ask that BOEMRE seek such an extension delay from the Court to accommodate the need to review additional information not yet available, but which has the potential to enhance the agency's ability to comply with the orders of the Court.

Independent of the January 21, 2011 date set by the Court, there is no urgent need for the SEIS to be completed by January 2011 or for a Record of Decision (ROD) to be issued by March 2011. There is no drilling now proposed in the Chukchi Sea during the 2011 open water season. Shell, which had proposed exploratory operations on its Sale 193 leases in recent years, has announced that it will be drilling only in the Beaufort Sea in 2011.

Secretary Salazar has already acknowledged that significant data gaps exist with respect to the arctic marine ecosystem and the associated changes being caused by accelerating climate change. He has ordered the U.S. Geological Survey (USGS) to prepare a report outlining the effects of oil and gas exploration on marine mammals and other resources, to determine what research is needed for effective and reliable oil spill response in ice-covered regions, to evaluate what is known about cumulative effects of energy extraction on ecosystems and other natural resources, and to review how ongoing climate change may mitigate or compound arctic energy development impacts.

The task assigned to BOEMRE by the Court and that assigned to the USGS by the Secretary are somewhat overlapping and clearly complementary. BOEMRE must determine whether missing information identified in the FEIS for Lease Sale 193 was essential or relevant, and the USGS must identify Chukchi and Beaufort Sea knowledge gaps. With the USGS report due to the Secretary in April, it would seem to make good sense to time the production of the Final SEIS and ROD to align the results of both efforts and to ensure that BOEMRE's compliance with the Court's order can benefit from the work of the USGS.

CONCLUSION

We have long advocated a precautionary approach to oil and gas leasing and operations in our arctic waters. In the past year, we have pointed to the essential components of such an approach adopted in August 2009 by the Department of Commerce in its Arctic Fishery and Management Plan, and asked that a comparable strategy be adopted by the Department of the Interior with respect to its responsibilities in the same arctic waters. The Commerce approach was adopted largely in response to the recognition that a warming arctic is bringing rapid and unpredictable change to the region. Disturbing revelations concerning failures in planning, preparation, oversight, and oil spill response in the less extreme and better understood waters of the Gulf of Mexico following the April 20, 2010 Deepwater Horizon blowout only bolster the arguments for caution in the challenging frontier of the Arctic. Significantly, retired U.S. Coast Guard Commandant Thad Allen, who oversaw the federal spill response in the Gulf, heralded the Fishery Management Plan as "a wise proactive measure to ensure that we find the right balance between the environment and economics for a healthy and sustainable Arctic region." We ask

that in finalizing the Lease Sale 193 SEIS, BOEMRE review the language and approach of the Arctic Fishery Management Plan, and either adopt a comparable approach and conditions for oil and gas leasing here, or explain why the caution appropriate with respect to fisheries is not appropriate with respect to oil and gas operations.

In the further interests of caution and consistency, we also urge BOEMRE to pursue with the Court the possibility of timing the publication of the Final SEIS to allow for review and consideration of the data gap analysis now being prepared by the USGS.

We ask that BOEMRE expand its analysis of potential human health impacts associated with new analyses in the SEIS and consider in more depth potential environmental justice concerns associated with the relative benefits and risks of leasing to our Inupiat residents.

Finally, BOEMRE should also submit to the State of Alaska a revised consistency determination assessing compliance of Sale 193 with the provisions of the Alaska Coastal Management Program.

Thank you for considering these comments.

Sincerely,



Edward S. Ita, Mayor

- cc: Harold Curran, Borough CAO
Andy Mack, Borough Mayor's Office, Government Affairs
Karla Kolash, Borough Mayor's Office
Taqlik Hepa, Borough Wildlife Department Director
Dan Forster, Borough Planning Department
Bessie O'Rourke, Borough Attorney
Johnny Aiken, AEWG Director
Aqquilluk Hank, Point Hope Mayor
Lucy Neakok, Point Lay Village Council
Enoch Oktolik, Wainwright Mayor
Bob Harsharek, Barrow Mayor
Kim Elton, Department of the Interior, Senior Advisor for Alaska Affairs
Pat Pourchet, Special Assistant to the Secretary of the Interior for Alaska Affairs

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Edward S. Itta, Mayor

July 16, 2007



Mr. Cleve Cowles
Acting Regional Supervisor,
Leasing and Environment (MS 8300)
Minerals Management Service
Alaska OCS Region
3801 Centerpoint Drive, #500
Anchorage, AK 99503-5823

Via E-Mail: akeis@mms.gov

Re: Comments on Chukchi Sea Lease Sale 193 Final EIS

Dear Mr. Cowles:

The North Slope Borough (Borough) appreciates this opportunity to comment to the Minerals Management Service (MMS) on the Final Environmental Impact Statement (FEIS) for proposed Chukchi Sea OCS Lease Sale 193. We are pleased that some of our comments on the Draft EIS (DEIS) have resulted in changes in the FEIS.

However, MMS has essentially taken the position that leasing is prudent regardless of inadequate knowledge of the area to be leased; the potential for significant impacts to so many resources, to our critical subsistence harvests, and to our health; and regardless of the near-impossibility of an effective response to oil spills under Chukchi Sea conditions. The persistent theme of the affected environment and environmental consequences sections of the document is the staggering lack of information regarding this vast marine area. With so little information upon which to base its decisions, it is unreasonable for MMS to allow Sale 193 to proceed.

Our position remains unchanged that oil and gas leasing should not occur in the Chukchi Sea, and therefore recommend adoption of Alternative II. Among the action alternatives, we join the Alaska Eskimo Whaling Commission (AEWC) in believing that Alternative III is preferable, and fully endorse the AEWC's FEIS comments on this point. We also

believe that adoption of Alternative IV is indefensible given that MMS acknowledged that it was based on a 20-year-old biological opinion from the National Marine Fisheries Service that is surely out of date and has in any event been unavailable for review.

With respect to the Exploration Seismic Survey Activities Alternatives, it is unclear why an additional alternative was not analyzed. Namely an alternative that would prohibit pre-Sale 193 seismic surveys in the 1,765 whole or partial blocks of the Corridor I (Alternative III) Deferral area along the coastward edge of the sale area until the lease sale decisions have been made and the NMFS/MMS Seismic Programmatic EIS has been completed. It would seem logical to have included such an alternative to track with Alternative III, in the same way Seismic Alternative B tracks with Alternative IV.

As was the case throughout the DEIS, many of the conclusions reached in the FEIS lack meaningful support. The same is true with respect to some responses to comments. The tact taken by MMS' response to the Borough's first identified comment, NSB 006-001, that the range of alternatives presented in the DEIS was inadequate, is one example. We set out a compelling basis for our assertion that the range of alternatives was inadequate. Rather than respond to our points, MMS simply states that it disagrees.

There are problems as well when an actual response is provided. With respect to response NSB 006-006, for example, MMS states: "[a]t present, no process is in place to acquire meaningful information regarding Russian commercialization and industrialization in the high Arctic. While MMS acknowledges the existence of various industrial activities, these activities are not well understood and, as a result, fall into the speculative category of activity as defined in Section V of this EIS." On the contrary, information is readily available concerning large-scale oil and gas development at Russia's Sakhalin Island. The details of the project, and the challenges it has and continues to face, have been extensively reported in the industry and general press. Shell's website describes that company's involvement, and thousands of other references are identifiable through a simple web search.

Response NSB 006-010 is non-responsive. We appreciate that "[t]he MMS acknowledges the impact of numerous meetings and documents reviews on the planning staff of the NSB and the even more limited manpower available in smaller communities". It is also apparent that "[t]he accelerated MMS leasing timetable and an increase in the number of seismic survey and exploration permits has taxed the agency, as well." None of this, however, relieves MMS of its responsibility to mitigate the identified and significant impacts to our minority North Slope population.

The workload of MMS and other agency staff is not of concern under the Environmental Justice Executive Order 12898. Nor were our comments limited to concerns about Borough and community staff workloads. They were meant to explain the dual nature of the impacts associated with continuous multiple overlapping planning processes. Each single review within the seemingly unending multitude of reviews deals with a proposal that would threaten the health and culture of the majority of our residents. Moreover, the reviews themselves have a hugely significant impact: The fear and anxiety engendered by

so much activity, independent of the outcomes, burdens both our subsistence-dependent residents and our community institutions.

NSB 006-016 is also non-responsive on any meaningful level to our identification of the cascading and complex impacts associated with the many overlapping planning processes, including the choices that must be made, and the effects felt by individual North Slope residents and the community as a whole.

With respect to NSB 006-011 and other responses to our comments concerning the necessity of MMS fulfilling its responsibility to analyze and mitigate the potential impacts of OCS oil and gas leasing on human health, we appreciate the additions to the document resulting from the consultation between MMS and Dr. Aaron Wernham, representing the Borough on these issues. However, MMS has failed to include or even respond to the health-related mitigation measures submitted by Dr. Wernham. This is a significant omission that must be corrected before any leasing decision can be made based on this EIS.

In conclusion, we strongly believe that oil and gas leasing, exploration, and development should not occur in the Chukchi Sea. The absence of baseline environmental data, the region's harsh weather and ice conditions, its remoteness from existing infrastructure, and the established lack of capacity to respond to a spill under even less challenging conditions require that there be no oil and gas leasing in the Chukchi Sea.

Thank you for considering these comments.

Sincerely,

Edward S. Itta
Mayor

cc: Johnny Aiken, NSB Director, Planning
Bessie O'Rourke, NSB Attorney
Taqlik Hepa, NSB Director, Wildlife
Karla Kolash, NSB Mayor's Office
Andy Mack, NSB Mayor's Office-Anchorage

Alaska Eskimo Whaling Commission

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July 16, 2007

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email: akeis@mms.gov, Attn: Sale 193 EIS

RE: Comments on Final EIS for Chukchi Sea Lease Sale 193

The Alaska Eskimo Whaling Commission appreciates this opportunity to provide comments on the Minerals Management Service's final environmental impact statement on Lease Sale 193, proposed for the Chukchi Sea.

Thank you for your time and attention in considering our comments. Please call me if you have any questions.

Sincerely,

/s/ Harry Brower, Jr.
Chairman

cc: AEWC Commissioners.
Senator Ted Stevens
Senator Lisa Murkowski
Congressman Don Young

COMMENTS OF THE
ALASKA ESKIMO WHALING COMMISSION ON THE
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR OIL AND GAS LEASE SALE 193, CHUKCHI SEA PLANNING AREA

July 16, 2007

INTRODUCTION

MMS is in the final process of conducting an environmental review for proposed oil and gas Lease Sale 193. The National Environmental Policy Act (NEPA) and the OCS Lands Act require that MMS use this process to do more than help fulfill the agency's responsibility to oversee offshore oil and gas development. Through these Acts, Congress also has required that the Secretary of the Interior, acting through MMS, undertake concrete, proactive measures to protect the marine and human environments affected by OCS development. These responsibilities can be met by selecting the alternative that is most able to meet the purpose and need of the proposed action while protecting the human and marine environments. In addition, under the Marine Mammal Protection Act's standard for the protection of our marine mammal subsistence resources, MMS must analyze and implement mitigation measures that preserve the availability of bowhead whales and other marine mammals for subsistence uses. MMPA 101a(5)(A) and (D).

Given the unique situation the agency faces in overseeing proposed development in the Arctic Ocean, the AEWC finds MMS' proposed environmental review process inadequate. The AEWC further believes that MMS has not presented adequate alternatives. As a means of enhancing its environmental review and expediting the current process, the AEWC strongly encourages MMS to support our community's efforts to participate more fully in the process, including participation in the development of mitigation measures.

The issues our community faces as a result of OCS oil and gas activities fall into two broad categories: environmental and socio-cultural. Under federal law, MMS is responsible for working with local communities to address impacts in both of these categories. We are aware of MMS' presence among our people as it gathers information and traditional knowledge to include in the EIS. We read promises in the Draft EIS that our input will be considered in the final decisions regarding this sale as others before it. Yet in northern Alaska, MMS, historically, has shown little willingness to take on the issues that it must face in order to address these impacts.

With respect to environmental issues, we urge the Secretary to reject MMS's preferred alternative IV and adopt Alternative III, which is highly likely to accomplish the purpose and need of the proposed action while simultaneously offering a protective buffer between oil and gas operations and the spring lead system where our villages conduct their spring bowhead whale hunts. In addition, certain of our villages are planning to

conduct fall whaling, and an adequate distance between whaling activities and oil and gas activities in the Chukchi Sea will be crucial to a successful hunt and to maintaining the safety of whaling captains and crew.

With respect to socio-cultural issues, we remain adamant that MMS revise its significance thresholds, or abandon them and review impacts on a case by case basis, using the regulations of the Council on Environmental Quality on the evaluation of significance using an analysis of context and ten intensity factors.

Finally, as we review the list of mitigation stipulations that fall short of our expectations and our recommendations, we are afraid that MMS once again is prepared to make decisions that do not address our needs and fears. For instance, we disagree with MMS's characterization that the only significant adverse effect to our bowhead whale subsistence hunt, our sociocultural systems, and environmental justice will occur in the "unlikely event" of a large oil spill. Significant adverse effects will occur as a result of routine program operations, such as exploration, construction, operations, and decommissioning of oil and gas development facilities.

We urge MMS, as always, to select the alternative and mitigation measures that will protect our marine resources and our subsistence livelihood, rather than focusing solely on the objectives of oil and gas companies in a time of soaring gas prices and record profit.

COMMENTS

I. The Secretary Should Adopt Alternative III As the Choice that Strikes the Most Effective Balance Between Development of the Resources of the Outer Continental Shelf and the Protection of Human and Marine Environments.

A. Alternative III Offers MMS The Best Chance To Serve The Purpose And Need Of The Proposed Action While Protecting The Living Marine Resources of the OCS and The Bowhead Whale Subsistence Hunt.

The purpose and need of the Proposed Action are to offer for lease areas in the Chukchi Sea OCS that might contain economically recoverable oil and gas resources. FEIS I-1. Both Alternative III and Alternative IV accomplish the purpose and need; however, Alternative III, which defers 1,765 lease blocks (Corridor I) from the Sale, offers greater protection of the human, biological and physical environments than does Alternative IV, the agency's Preferred Alternative.

According to MMS's "Opportunity Index," Alternative III allows very good odds that industry will successfully produce the one commercial development that MMS envisions occurring under its Proposed Action. FEIS IV-7. Also, Alternative III offers a greater buffer between the noise disturbance of exploration and development than does

Alternative IV. Fewer exploration and production wells are likely to be drilled if a smaller planning area is offered for leasing. This means fewer support vessels, less barging, fewer fixed wing and helicopter trips from offshore project sites to the mainland, and generally less activity in the Chukchi Sea.

B. MMS Inexplicably Cites to A Twenty-Year-Old Biological Opinion To Support Its Choice of Alternative IV.

MMS uses a 1987 Biological Opinion from the National Marine Fisheries Service to support its Alternative IV, the Preferred Action. This decision creates two problems for the agency's recommendation. First, it is based on an out-dated analysis rather than the best available science.

Second, the agency apparently is unable to provide a cite that would allow members of the public to locate this reference. If MMS plans to recommend to the Secretary a particular set of resource management choices, the agency should be able to cite to the study that provides support for those choices.

However, the citation to the study is missing from the FEIS's bibliography, and NMFS Administrative Office in Anchorage cannot locate the referenced study from the information, "1987 NMFS Biological Opinion on the Chukchi Sea" which is the only clue to the reader of where to look for this analysis. MMS should not make its primary resources inaccessible to the reader in this way. It leads to a loss of transparency and to situations of mistrust and anger.

II. MMS Discounts the Degree to Which Current High Oil Prices Drive the Oil and Gas Industry's Race to the Chukchi Sea.

Throughout the FEIS, MMS maintains that industry will encounter regulatory and logistical obstacles that will reduce the likelihood that development will occur – less than 10 percent, according to MMS. [However, the Open Water Season of 2006 touched off an explosive increase in seismic exploration in the Chukchi and Beaufort Seas. The intensity continues during the 2007 Open Water Season, as Shell and other companies will spend hundreds of millions of dollars to search for oil in the waters from which we take our native foods. The future planned level of seismic activity is forecast in stark relief in the National Marine Fisheries Service's (NMFS) and the Minerals Management Service's (MMS) Draft Programmatic Environmental Impact Statement for seismic operations, which contemplates six seismic operations in the Chukchi Sea. It is unfathomable that companies would devote so much money and human effort into an enterprise in which they have only a 10% chance of finding and developing the resources of the OCS.]

To accommodate industry demands for access to the Chukchi Sea in 2006, MMS prepared a Programmatic Environmental Assessment (see footnote 3). The PEA, and

especially its draft, offered an unusually thorough, well reasoned, and scientifically supported analysis, in which MMS identified numerous and extensive gaps in data on the use of the Chukchi Sea by wildlife, including endangered whales and birds. Given this lack of data, both MMS and NMFS imposed strict monitoring and mitigation measures on the geophysical operations permitted for 2006. However, one company sought legal protection from its obligation to meet these requirements, and NMFS and arctic OCS stakeholders still do not know, a year later, whether or not a second company in fact complied with them, since industry has not produced the analysis of the 2006 monitoring that would present the needed information.

It is clear that oil companies will not necessarily comply with the mitigation that is imposed on their permits. To the extent MMS is relying on its standard complement of mitigation measures, including any contingent incidental harassment authorizations from NMFS, MMS must include in its FEIS the fact that oil companies may not be willing to comply and may be factoring any non-compliance penalties into the cost of doing business offshore in the Arctic.

Industry interest in the Chukchi Sea at this time meets or exceeds historic levels. Although MMS dismisses oil price as a cause of soaring industry interest in the Chukchi Sea, the agency cannot ignore the possibility, even the probability, that this interest is driven by the price of oil, which on July 13 was \$74.35 per barrel.

III. MMS's Conclusions Regarding the Effects of Lease Sale 193 on Subsistence Harvest Patterns, Sociocultural Systems, and Environmental Justice are Based on Inappropriate Thresholds and a Misplaced Reliance on the Effectiveness of Current Mitigation Measures.

A. Significance Thresholds for Subsistence Harvest Patterns, Sociocultural Systems, and Environmental Justice are Inappropriate.

The AEWC recently learned of the existence of a letter from MMS to the AEWC's Executive Director, dated May of 2006. It is standard practice in the AEWC office to log all incoming mail. There is no record of this letter having been received at the AEWC's office in Barrow. The letter addresses MMS's approach to the evaluation and reporting of significance for Subsistence Harvest Patterns, Sociocultural Systems, and Environmental Justice, and much of its text is reproduced in the analysis for Lease Sale 193. Although we are writing a formal response, it is appropriate to address some issues in the letter in these comments.

The Council on Environmental Quality has promulgated regulations that define significance for NEPA purposes according to the context and intensity of the proposed action. 40 CFR §1508.27. With respect to context, CEQ requires that MMS determine significance through an analysis of local effects, and MMS does a reasonable job of assessing a range of possible effects on our Chukchi villages, in the context of the

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importance of subsistence practices in our communities, how they interconnect us, and how they are essential to our cultural and physical survival. However, when MMS arranges a scale depicting the degree of impacts, the departure from the CEQ regulations, and from reality, begins.

CEQ has listed ten "intensity factors" that MMS has never analyzed with respect to the effects of oil and gas activities on our coastal subsistence way of life. MMS has listed these factors, but not used them in analysis. We list them here, along with what we might expect MMS to consider in its analysis.

The following should be considered in evaluating intensity:

- 1. "Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial."

As an example (and in the interest of time and space, we include only one), MMS is tasked with providing a regulatory program in which industry may exploit the OCS for oil and gas resources. This produces a national benefit, and MMS usually notes the "benefits" of local employment with oil and gas companies. But very few of these jobs are awarded to Native people. In fact, while average over-all salaries on the North Slope are relatively high, the majority of Inuqtiats live below the poverty line. There is a net, adverse significant effect here that MMS does not include in composing its significance thresholds for sociocultural systems.

- 2. The degree to which the proposed action affects public health or safety.

This is perhaps the most important of the intensity factors from the whaling captains' perspective. When noise and disturbance from oil and gas activities disrupt the migration and spook bowhead whales, it is the whaling captains and crews who risk their lives to pursue the whale farther offshore. Meat spoilage in a long tow home is a significant risk, and a great waste of the animal, the effort of the whalers, and the strike from our quota allotted to us by the International Whaling Commission. This "intensity factor" alone could vault most oil and gas related disturbances into significance. MMS does not provide this information in its letter to us, or in describing its approach to constructing its significance thresholds that are relevant to our people.

- 3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

We have not seen MMS discuss the importance of the cultural resource of the bowhead whale when formulating the significance thresholds. While we would discourage MMS from comparing the importance of one subsistence resource against another, the importance of the bowhead whale does exceed all others in our

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subsistence practices. The significance threshold for the resource of the bowhead whale should not be lumped into the "flexible" formula MMS has devised to encompass all resources. This is not our reality, and it should not be part of MMS's calculation of significance thresholds for our lives and our bowhead whale resource.

- 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

There is no greater controversy in our villages than the effects of offshore oil and gas development on our bowhead whale and other marine mammal hunting and on the livelihood of our villages. This intensity factor, by itself, should qualify effects to our communities as significant.

- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The risks to our human environment could not be more unique, and the risks of impacts to the bowhead whale in the Chukchi Sea, where bowhead distribution and use of habitat is uncertain, are both unique and unknown. This intensity factor should appear with great emphasis in MMS analyses and its calculation of significance thresholds.

- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

MMS's implementation of its regulatory program for oil and gas leasing will set precedent in the Chukchi Sea, where oil and gas exploration and development has not yet moved forward, leaving a still-pristine sea. MMS should address this factor in its significance threshold formula.

- 7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

MMS evaluates lease sales individually. It anticipates that leases will be bought, that seismic testing will occur, that exploration wells will be drilled. Bottom founded drilling structures will be constructed, with associated noise effects on bowhead whales. Production of oil is the goal of the program, and in the Chukchi Lease Sale 193, MMS anticipates 8.4 billion barrels of oil coming out of the seabed, piped onshore via a pipeline that will make landfall somewhere near one of our villages. Helicopters, marine traffic, seismic source vessels, supply boats, fixed wing aircraft, pile driving, all will attend the process of discovering, and producing oil. These activities will occur, MMS anticipates, as a result of this Sale. In the current OCS

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Five Year Program, another lease sale is planned for the Chukchi Sea that will have similar consequences. Cumulatively, these activities are certain to affect, significantly and adversely, the marine mammals using the Chukchi Sea habitat, including our bowhead whales, and similarly to adversely affect our marine mammal subsistence hunting. MMS must acknowledge this likelihood in its significance thresholds.

- 8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

MMS's leasing activities will cause loss and possibly destruction of our cultural resources—our hunt, our livelihood, our food. This should be part of MMS's significance threshold formulation.

- 9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The bowhead whale is an endangered species. Although NMFS has issued a Biological Opinion declaring "no jeopardy" to bowhead whales, this goes to the survival of the bowhead whale. MMS's activities could have population level effects that stop short of endangering the survival of the bowhead whale population, but which slow its recovery. Permitted activities in the Beaufort Sea, between seismic surveying and exploratory drilling in Camden Bay, are likely to drive whales, including cow-calf pairs, from their nearshore feeding habitat. These are real effects on an endangered population of whales, and these facts should be represented in MMS's significance thresholds.

- 10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Last year one, and perhaps two OCS operators engaging in seismic data collection failed to comply with monitoring requirements that were listed in an incidental harassment authorization that had bearing on the validity of the G&G permit that MMS had issued to them. Ultimately one company evaded compliance by obtaining a stay of the monitoring requirement in federal court. Neither NMFS nor MMS suspended their permits of this company, even though it was in violation of federal law long before the court decision was issued. This year, we are aware that one oil company may intend to accept the financial penalty of failing to comply with an air permit from EPA, and factor it into the "cost of doing business." These are violations of federal law. At least one company this year has not responded to North Slope Borough ordinance requirements that it conduct monitoring because it disagrees with the Borough's Planning Department over the effects its activities are likely to have on marine mammals. This is potentially a violation of local law. MMS needs to

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factor these possibilities into its significance thresholds.

- B. In Setting Significance Thresholds, MMS Ignores the Context and Intensity Analysis Required by the Council on Environmental Quality, and Instead Arbitrarily Formulates Standards Based on "Magnitude" and "Duration."

MMS has chosen to base significance on the yardsticks of "magnitude and duration" of an effect, standards that can apply universally to any action by any agency. The CEQ criteria, however, are context-dependent. CEQ directs the agency to look at the unique substantive characteristics of an affected area and population, and the impacts of a specific proposed action in that context. Rather than do this, MMS created a scale of effects ranging from "very low" to "very high." Then the agency arbitrarily decided that "significant" effects equate to conditions described in the "high" category. MMS said it deemed the "high" category as significant to maintain continuity among the analyses for subsistence harvest patterns, sociocultural systems, and environmental justice.

While the AEWC recognizes that effects to subsistence is common to each of these three resource categories, we do not understand how selecting the "high" level as the significance standard for all three continuity among them. Certainly we do not agree that conditions for any of the categories should reach the "high" adverse effect level for MMS to consider them significant.

Principles of Environmental Justice in Executive Order 12898 direct that federal agencies take into account the views of low income minority communities. MMS says it has taken our comments over the years to inform its significance thresholds. Indeed, it includes in the discussion of the current lease sale the effect on subsistence resources and sociocultural systems remarks going back to the 1970s that describe the importance of subsistence to our communities. Citing to local testimony is only the first step, however. The next step is to use this testimony in an analysis of environmental and socio-cultural impacts within the context from which these comments arise.

Instead of employing the second step, MMS is using our testimony to select, over decades of remarks, those comments that support its approach or are neutral to it—comments that were made without the speaker knowing his or her words would be taken out of context and used against our community to come up with a 5-year, chronic-displacement significance threshold for everything that the speaker holds dear about our home and our subsistence livelihood.

Finally, MMS defends the current significance thresholds for subsistence by arguing that the thresholds were long in the making ("have been developed over many years by MMS anthropologists and socioeconomic specialists"). First, we would appreciate it if MMS would provide cites to the peer reviewed anthropological and sociological literature on which it relies. Second, such a rationale ("it took a long time for us to do

it") is not based in law or reason. It is possible to spend a very long time trying to do something and still get it wrong, as MMS has done here.

Until MMS addresses the CEQ "intensity factors" and explicitly seeks input on the issue of significance, its significance thresholds remain outside the contemplation of Congress in its enactment of NEPA, CEQ in its promulgation of its regulations describing intensity factors, Executive Order 12898 in requiring the incorporation of the views of the affected low income, minority communities, and plain common sense.

C. MMS Should not Rely on the Ability of the Standard Mitigation Measures to Mitigate Adverse Effects to the Bowhead Whale Subsistence Hunt.

MMS has long relied on its "standard mitigation measures" to conclude that any significant effects to subsistence harvest patterns, sociocultural systems, and environmental justice would be mitigated to the point where the effects were no longer significant for NEPA purposes. We disagree that these mitigation measures are effective to the point of rendering adverse effects insignificant.

Stipulation 2 Orientation Program. This program is designed to "increase workers' sensitivity to, and understanding of, values, customs, and lifestyles of local Native Communities." FEIS IV-223. While we certainly would not stand in the way of education for any person wishing to know more about our way of life, we do not see a direct connection with increasing someone's sensitivity and how this will "prevent any conflicts with subsistence communities." A sensitive oil worker with orders to shoot seismic or drill a hole or barge equipment from one place to another is still going to shoot seismic, drill the hole, or barge his equipment because he is being paid to do those things. How he feels about it is irrelevant. This is not mitigation as we understand the meaning of that word.

Stipulation 4 — Industry Site-Specific Monitoring Program for Marine Mammal Subsistence Resources. We support monitoring wholeheartedly. It is an important part of our negotiated Conflict Avoidance Agreements with industry, and NMFS requires it through implementing regulations of the Marine Mammal Protection Act. However, and we cannot overstate this, monitoring, of itself, is not mitigation. Monitoring has the potential to lead to mitigation after data are analyzed and understood, but it does not belong in a list of "mitigation measures." Monitoring, no matter how well conceived or well implemented or appropriately placed, is still just that – monitoring.

Stipulation 5- Conflict Avoidance Mechanisms to Protect Subsistence Whaling and Other Subsistence-Harvest Activities. The AEWC agrees with the goal of this stipulation and is pleased that MMS shares our view that the industry should be required to avoid conflicts with subsistence activities. However, there are elements of

this "mitigation" measure that will prevent it from ever being more than a representation of MMS's wishful thinking.

First, MMS places unreasonable and unjustified reliance on the CAA to solve all the potential conflicts that could arise from timing and location of oil and gas operations with respect to bowhead whaling. MMS repeatedly cites the CAA as a mitigation measure per se that will render adverse effects to the hunt insignificant. Unfortunately, as we have seen this year, the CAA's carefully designed mitigation measures are useful only when companies agree to comply with and implement them. Simply, an agreement is not mitigation. The activities undertaken pursuant to the agreement may or may not be mitigation, and compliance with those activities cannot be left to the discretion of the industry.

When companies are not willing to work with us, it is up to MMS and NMFS to have adequate mitigation measures in place. MMS should not use the CAA to deem potential adverse effects "mitigated," thereby excusing itself from its own responsibility for formulating and implementing effective mitigation. This is the only form of "enforcement" that will prove truly effective. Without strong mitigation standards promulgated up-front by MMS and NMFS, the odds are very low that an effective CAA can be developed or enforced.

Second, MMS's proposed approach to handling conflicts between us and the industry in the absence of a CAA does not inspire any confidence in us and appears consciously designed to ensure that we can never expect a fair deal or effective remedy. All major decisions are in the hands of the MMS Regional Supervisor ("RS"). In the case of a conflict between us, the proposed "Stip 5 process" would apparently work like this: A conflict will arise where whalers will anticipate or experience adverse effects to the whale migration so that hunting is or will become more difficult or impossible. Theoretically, the AEWC would respond by requesting that the MMS Regional Supervisor convene a group meeting. If the RS is convinced that there is a real problem, she may decide to call the meeting.

Next, our subsistence hunters would undergo an examination of the facts of our case in a hearing setting where the MMS RS – whose superiors have already approved the OCS operators' action – is the judge. The RS hears the facts from each side and determines "the adequacy of the measures taken to prevent unreasonable conflicts with subsistence harvests."

If, in the RS's judgment, the OCS operator is responsible for an "unreasonable" conflict, she would be put in the position of having to overrule her agency's prior decision to permit the activity she has determined causes "unreasonable conflicts." In the meantime, an entire hunting season and hundreds of tons of food can be lost. Hunting is an opportunistic activity, especially in the unpredictable ice and weather conditions of

the Arctic Ocean. It is therefore unlikely that our hunters would have time to attend a hearing and argue their case until after the season is over and the harm is done.

Furthermore, Stipulation 5 and its arbitration process are set up to favor OCS operators, not us. Its standards are not quantifiable, and therefore subject to manipulation and improper rationalization. For instance, how might one quantify an "unreasonable" conflict? If our whalers must go twenty miles rather than ten miles offshore to find whales, does that cross the "unreasonable" line? Is that a decision best left to the RS? If meat is spoiled, but not the muktuk, is the disruption a "reasonable" one? If the whales are "spooky" in the whalers' judgment, and harder to catch, does that mean the operator must close down operations? Should those kinds of choices be left to the RS? The same hard questions apply to the standard of what may or may not be an "adequate measure" to prevent the "unreasonable" conflicts.

In addition to these failures of substantive standards, the we are reluctant to sit in a room with oil and gas operators and engage in a game of "he said, she said." For many of us, English is our second language, and we communicate best through our actions, not our words.

For the reasons above, we do not consider Stipulation 5 effective mitigation, and MMS should not turn to Stipulation 5 to buttress its arbitrary conclusion that adverse effects to our hunt and our communities from oil and gas operations will be resolved through the "Stip 5 process."

Environmental Organizations



441 West 5th Avenue – Suite 300
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November 24, 2010

John T. Goll
Regional Director
BOEMRE – Alaska OCS Region
3801 Centerpoint Drive – Suite 500
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Attn: Lease Sale 193 Draft SEIS - Chukchi Sea

Dear Mr. Goll:

The purpose of this letter is to provide comment on the Draft Supplemental Environmental Impact Statement for Lease Sale 193 (LS 193 Draft SEIS) in the Chukchi Sea, prepared as required by the U.S. District Court to address deficiencies in the original Lease Sale 193 Final EIS (LS 193 FEIS). The court has directed that the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) determine whether missing information, identified by the agency itself in the LS 193 FEIS, is “essential or relevant” to making a reasoned decision regarding Lease Sale 193 and, if so, “whether the cost of obtaining the missing information [would be] exorbitant or the means of doing so unknown.” *Federal Register*, Vol. 75, No. 199 (October 15, 2010).

The LS 193 Draft SEIS fails to provide the Secretary of the Interior with the information required to make a reasoned choice among alternatives, including the “No Action” alternative. The document should be rescinded and prepared anew. The original LS 193 FEIS included approximately two hundred and fifty specific instances in which BOEMRE explicitly identified a lack of scientific knowledge regarding resources that could be impacted as a result of the lease sale and the reasonably foreseeable oil and gas development that could follow. In many cases, these statements recognize a fundamental lack of knowledge regarding important biological resources, including many that are vital to continued subsistence harvest (e.g., marine mammals) by communities on the North Slope. Just a few of the statements in which BOEMRE expressly noted its lack of knowledge, include the following:

- “There is uncertainty about the effects on cetaceans in the event of a large spill.”
- “Given a lack of contemporary abundance and distribution information, large spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected.”

¹ Minerals Management Service (MMS) at the time the Lease Sale 193 FEIS was published.

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agency’s statements acknowledging myriad and sweeping scientific knowledge deficiencies in the LS 193 FEIS have been dismissed by BOEMRE as unimportant and irrelevant to the Lease Sale 193 environmental analysis required by the National Environmental Policy Act (NEPA).⁴

This conclusion is unjustified and fundamentally flawed. As a matter of law as well as sound policy, the environmental analysis for Lease Sale 193 must provide decision-makers with a sufficient understanding of the “reasonably foreseeable” environmental consequences of OCS leasing in the Chukchi Sea so as to permit a reasoned choice among alternatives. In light of the many admissions regarding fundamental knowledge gaps (e.g., “the paucity of information available on marine mammal ecology in the Chukchi Sea”), BOEMRE’s claim that it has available “sufficient information to support sound scientific judgments and reasoned managerial decisions”⁵ is not credible.

BOEMRE’s LS 193 Draft SEIS is inconsistent with the Obama Administration’s stated commitment to making decisions on the basis of sound science. This commitment to sound science includes the on-going effort by another agency within the Department of the Interior, the U.S. Geological Survey (USGS), as directed by Secretary Salazar, to identify and evaluate the importance of Arctic Ocean science knowledge gaps:

“As part of the Administration’s commitment to ensuring that offshore oil and gas decisions are based on science and sound information, the U.S. Geological Survey will examine and summarize what information is available about the Arctic and what knowledge gaps may exist regarding environmental sensitivities, including impending climate change, and other factors that would be considered in decisions about potential future development in the Chukchi and Beaufort Seas.”⁶

Rather than discounting so many scientific knowledge gaps as unimportant, BOEMRE should await the USGS findings regarding Arctic Ocean knowledge gaps and use that report to inform BOEMRE’s revised NEPA analysis of Lease Sale 193.

BOEMRE’s LS 193 Draft SEIS is also at odds with Secretary Salazar’s commitment to scientific integrity as reflected in the recently issued Order 3305 - Ensuring Scientific Integrity within the Department of the Interior. This departmental order expressly recognizes the critical role that sound scientific knowledge plays in the creation

⁴ In its justification for the dismissal of knowledge gaps and missing information as unimportant and “not essential to a reasoned choice among alternatives” BOEMRE cites the “existence of other environmental laws and regulations that would preclude significant adverse effects on particular resources.” (Lease Sale 193 Draft SEIS – Appendix A). The mere existence of other laws and regulations can not assure that significant adverse effects will be precluded. The fact that BP’s oil spill response plan for the Gulf of Mexico “existed” as required by law in no way precluded significant adverse effects from the *Deepwater Horizon* blowout (although it could be argued that BP’s plan did succeed to the extent that no walrus were harmed by the Gulf spill). Moreover, NEPA requires that the effects of alternatives be described and, if the agency relies upon mitigation to prevent or avoid adverse effects, then that these mitigation measures be described in detail. BOEMRE does not do this in the LS 193 Draft SEIS.

⁵ Lease Sale 193 Draft SEIS, Chapter 1, The Proposed Action, p. 11

⁶ Statement of USGS Director Marcia McNutt, “Secretary Salazar Unveils Arctic Studies Initiative that will Inform Oil and Gas Decisions for Beaufort and Chukchi Seas” DOI Press Release (April 13, 2010)

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- “For many species [of coastal and marine birds], the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high.”
- “Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur.”
- “Because of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas.”
- “Several species [of fish] are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.”
- “Late summer distribution and fall migration patterns [of beluga whales] are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified.”

This candor respecting BOEMRE’s recognition of a widespread dearth of scientific information available to support a well reasoned analysis of LS 193 impacts is consistent with recent observations of Alaska’s Governor Sean Parnell:

“The Arctic, literally, needs to be put on the map. Scientific research and economic exploration are set back by low quality, decades old mapping data. ... There is no accurate baseline to measure change, to identify trends and patterns, or predict potential outcomes.”⁷

Remarkably, however, BOEMRE’s court-ordered LS 193 Draft SEIS concludes that *none* of the many noted knowledge gaps identified in the original LS 193 FEIS must be addressed to support its environmental analysis.

“BOEM[RE] analysts determined that while many statements of incomplete or unavailable information were broadly relevant to the important issues at hand, *none* were essential for a reasoned choice among alternatives.”⁸ (emphasis added)

That is, BOEMRE has concluded that environmental impacts in the planning area have been sufficiently analyzed even as the agency acknowledges that rare or unique species could be extirpated but that due to a “lack of contemporary abundance and distribution information” such an impact “would likely go unnoticed or undetected.” All of the

⁷ Governor Sean Parnell, testimony to the Homeland Security Subcommittee of the Senate Appropriations Committee, *Arctic Sounder*, “Research for Arctic development called out of date” (August 27, 2009)

⁸ Lease Sale 193 Draft SEIS – Appendix A

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of policy because of DOI’s mandate to properly protect the nation’s natural resources. In short, if important policy choices, such as *whether or where* to lease lands for oil and gas development in the Arctic Ocean, are to be made on the basis of sound science they cannot be made in the absence of sound science. By definition, inadequate scientific knowledge precludes the possibility of a well reasoned decision.⁷

Of particular concern is BOEMRE’s continued reliance on manifestly inappropriate assumptions regarding the potential impact of a “large” oil spill. A realistic large-scale oil spill event has never been evaluated by BOEMRE for the Chukchi Sea. The LS 193 Draft SEIS, and the underlying LS 193 FEIS, persist in severely underestimating possible oil spill impacts. This precludes any meaningful evaluation or understanding of a credible large-scale spill scenario and negates the utility of the NEPA analysis prepared to this point. The so-called “large” spill considered by BOEMRE in the original LS 193 FEIS (i.e., 1,500 – 4,600 bbl) is inconsequential in light of what is known to be a realistic spill possibility in light of the Gulf of Mexico disaster. The maximum oil spill analyzed in the LS 193 FEIS – a 4,600 bbl spill from a ruptured pipeline – is less than one tenth of the daily estimated flow from the *Deepwater Horizon* spill (52,700 – 62,200 barrels per day). The maximum 4,600 bbl spill assumed for the Chukchi Sea in the LS 193 FEIS is less than one-tenth of one percent (0.09%) the size of the *Deepwater Horizon* spill (5 million barrels).⁸ While certainty about the exact size of a spill can not be known in advance, a disparity of *multiple orders of magnitude* between the BOEMRE-identified maximum spill (4,600 bbl) and a credible large-scale spill, is not reasonable. BOEMRE’s relatively small maximum spill assumption effectively cripples the evaluation of environmental impacts and prevents the Secretary of the Interior from receiving the necessary analysis required by NEPA.

The LS 193 FEIS analysis inappropriately dismissed the possibility of a blowout:

“We consider blowouts to be unlikely events.... Very few blowout events have resulted in spilled oil and the volumes spilled are often small After the Santa Barbara blowout in 1969, amendments to the OCS Lands Act and implementing regulations significantly strengthened safety and pollution-prevention requirements for offshore activities.”

Especially in light of the *Deepwater Horizon* and the widespread recognition that confidence in the regulatory oversight provided by the MMS (now BOEMRE) was thoroughly misplaced, this language seems darkly quaint. Dismissing even the possibility

⁷ While attention has been drawn to past and on-going industry-sponsored research in the Arctic Ocean, it is essential to recognize that research *activity* must not be confused with scientific *knowledge*. There is important research underway but the many identified knowledge gaps make it clear that numerous questions remain unaddressed regarding the basic ecology of the Arctic Ocean. The various wall charts displayed by BOEMRE at the public hearing in Anchorage listing research projects are no substitute for the much needed over-arching science plan for the Arctic Ocean. This plan should synthesize existing knowledge, identify key knowledge gaps and support long-term research to address information needs.

⁸ See: <http://www.oilspillcommission.gov/document/amount-and-fate-oil>, National Commission on the *Deepwater Horizon* Oil Spill.

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of a blowout in the Chukchi Sea can not be considered reasonable nor can this omission be dismissed as a mere "technical deficiency at the lease sale stage."⁹

Failure to evaluate the consequences of a blowout contradicts the guidance provided by the Council on Environmental Quality (CEQ) regarding NEPA analysis of offshore oil and gas development. In the August 16, 2010 report published by the Office of the President, it is stated that BOEMRE "has committed to using the following CEQ recommendations...."¹⁰ This includes that BOEMRE's NEPA documents are to:

"provide decision makers with a robust analysis of reasonably foreseeable impacts and include an analysis of reasonably foreseeable impacts associated with low probability catastrophic spills for oil and gas activities on the Outer Continental Shelf."¹¹

The report notes that BOEMRE did not anticipate the possibility of a catastrophic spill as a reasonably foreseeable impact in the case of the *Deepwater Horizon*. The CEQ report unambiguously states:

"BOEM[RE] should identify potentially catastrophic environmental consequences and accurately assess them as part of its decision making. ... BOEM[RE] will ensure that potentially catastrophic consequences will be identified, assessed and considered as part of its decision making."¹²

That commitment has yet to be fulfilled with regard to the analysis of Lease Sale 193.

Failure to evaluate a large-scale blowout scenario as part of the Lease Sale 193 environmental review prevents the NEPA analysis from fulfilling its essential purpose: to provide decision-makers the ability to make a reasoned choice among leasing alternatives, including the "No Action" (no lease) alternative. Moreover, while it has been argued elsewhere that "additional Environmental Impact Statements will be required at the later exploration, production, and development stages"¹³ this has not, in fact, turned out to be the case. Reasonably foreseeable impacts from a blowout from Shell's drilling plans were not evaluated by BOEMRE prior to approval of Shell's exploration plans for drilling in the Arctic Ocean in 2010. Shell's most recent proposal to drill in 2011 also fails to analyze the effects of a blowout.

⁹ *Akutan v Hodel* (1988)

¹⁰ <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf> Office of the President, *Report Regarding the Minerals Management Service's National Environmental Policy Act Policies, Practices and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development* (August 16, 2010), p. 22

¹¹ Office of the President, *Report Regarding the Minerals Management Service's National Environmental Policy Act Policies, Practices and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development* (August 16, 2010), p. 26

¹² Office of the President, *Report Regarding the Minerals Management Service's National Environmental Policy Act Policies, Practices and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development* (August 16, 2010), p. 28-29

¹³ *Akutan v Hodel* (1988)

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obtained (i.e., because costs of obtaining it are exorbitant or the means to obtain it are not known) the agency:

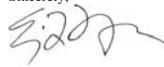
"shall include within the environmental impact statement the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community."¹⁶ (emphasis added)

The regulatory definition of "reasonably foreseeable" includes "impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason."¹⁷ The *Deepwater Horizon* experience has clearly established a blowout during exploration drilling as a "reasonably foreseeable" event that would have significant adverse impacts in the Arctic Ocean. A large-scale blowout scenario should now be rigorously evaluated. To meet the regulatory standard, this analysis should evaluate the impacts of a late season blowout that continues over an extended period of time into the winter freeze up.

Conclusion

1. The recently released LS 193 Draft SEIS is not credibly responsive to the court order that BOEMRE reconsider its analysis and determine whether: a) the knowledge gaps identified by the agency are relevant or essential to making a reasoned choice using the NEPA analysis, and b) the cost of obtaining the missing information is exorbitant, or the means of doing so unclear. The LS 193 Draft SEIS should be rescinded and prepared anew.
2. The NEPA analysis, including the LS 193 Draft SEIS and the associated LS 193 FEIS, remain deficient in the absence of an analysis of a credible "large" spill. The reasonably foreseeable impact of a blowout has not been analyzed and thereby precludes a reasoned decision-making process regarding Lease Sale 193.
3. A credible large-scale blowout scenario should now be evaluated as part of the LS 193 analysis. To be meaningful, this analysis should assess impacts of a late season blowout that continues over at least 30 days¹⁸ and extending into the winter freeze up.

Sincerely,



Eric F. Myers
Director of Policy

¹⁶ CEQ NEPA Regulation 1502

¹⁷ CEQ NEPA Regulation 1502

¹⁸ A minimum 30-day blowout is an appropriate standard for analysis as indicated by 30 CFR 254.47.

It should be noted that even if a blowout scenario were to be evaluated at a later point in the permitting process, analysis of a credible, large-scale spill/blowout is needed at the stage of the lease sale in order to permit the Secretary of the Interior to make a reasoned decision among leasing alternatives, including the "No Action" alternative. While it has been argued that more information will be available at later stages of the permitting process, thus allowing the Secretary of the Interior to possibly modify oil development plans, this perspective inherently acknowledges that decisions made at the lease sale stage are fundamentally distinct from subsequent authorizations.

It is at the time of the lease sale that the decision is made as to *whether or where* leasing should take place while subsequent authorizations concerning exploration or development are directed at making decisions about *how* activities should take place. The theoretical opportunity to analyze an appropriate large spill/blowout scenario at a subsequent point in the regulatory process can not be considered a substitute or otherwise fungible in terms of satisfying the NEPA analysis required at the time of a lease sale.

The LS 193 Draft SEIS further misleads when it seeks to justify the dismissal of incomplete, missing or unavailable information:

"[I]n the unlikely event of a large oil spill, it is well understood that environmental impacts could be severe. The severity of potential impacts would be nearly identical under any action alternative..."¹⁴

This statement does not withstand scrutiny as the true severity of potential impact that would be caused by a credible, large-scale spill in the Chukchi Sea has never been analyzed. A maximum spill of 4,600 bbl is only a small fraction of what should be evaluated as a reasonable spill/blowout possibility. Because the LS 193 FEIS assumed an unjustifiably small oil spill, the "severity of potential impacts" has not, in fact, been considered. Again, absent this needed analysis, critical information remains unavailable to decision-makers charged with evaluating whether or where to offer leases.

The LS 193 Draft SEIS purports to address this deficiency with the assertion:

"[A]ny change in likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed."¹⁵

As noted, however, the impact analysis of the so-called "large" spill considered in the Lease Sale 193 FEIS is based upon the unreasonable assumption of an undersized spill that grossly understates possible impacts.

Analysis of a credible, large-scale spill/blowout scenario per se by BOEMRE is mandatory as a reasonably foreseeable adverse impact. Even if all of the information relevant to analyzing a "reasonably foreseeable" significant adverse impact cannot be

¹⁴ Lease Sale 193 Draft SEIS – Appendix A

¹⁵ Lease Sale 193 Draft SEIS, p. 16

Alaska Wilderness League, et al-Fourteen Environmental Organizations Comment

ALASKA WILDERNESS LEAGUE – CENTER FOR BIOLOGICAL DIVERSITY
DEFENDERS OF WILDLIFE – EARTHJUSTICE
NATIONAL AUDUBON SOCIETY – NATURAL RESOURCES DEFENSE COUNCIL
NORTHERN ALASKA ENVIRONMENTAL CENTER – OCEAN CONSERVANCY
OCEANA – PACIFIC ENVIRONMENT – REDOIL – SIERRA CLUB
THE WILDERNESS SOCIETY – WORLD WILDLIFE FUND

November 30, 2010

VIA EMAIL

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Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director:

The undersigned groups hereby submit the following comments to the draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act (NEPA).

The draft SEIS purports to address the issues identified by the Alaska Federal District Court's remand order in *Native Village of Point Hope v. Salazar*, No. 1:08-cv-00004-RRB (D. Alaska). Rather than furthering the Obama administration's commitment to sound science, however, the draft appears to be a paper exercise designed to justify the earlier decision to hold Lease Sale 193. For the reasons explained below, the draft should be rescinded, a thorough assessment of missing information undertaken, and a re-assessment of natural gas development conducted. Once it has prepared an adequate and informative draft SEIS based on that information, BOEMRE should reengage in a public comment period. Thereafter, the agency should consider anew in light of these new analyses whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

In *Native Village of Point Hope*, the Court determined that Lease Sale 193 was held in violation of NEPA because BOEMRE prepared a flawed environmental impact statement (EIS). BOEMRE failed to conduct a full analysis of missing information about the Chukchi Sea and the effects of oil and gas activities pursuant to Council on Environmental Quality regulation 40

C.F.R. § 1502.22, and it failed to analyze the potential impacts of natural gas development. Accordingly, the Court remanded the decision to the agency with direction to redo its environmental analysis in these respects. In the draft SEIS, BOEMRE falls far short of satisfying the Court's order to meet the requirements of NEPA.

With respect to the Section 1502.22 missing information analysis, BOEMRE acknowledges it cannot make basic assessments of the lease sale's impacts in light of data gaps, but it concludes in the draft SEIS that *not one piece of information* identified as missing in the original EIS is essential to the lease sale decision. The conclusion is not supported or credible, demonstrates a desire to proceed quickly rather than deliberately, does not comply with the law, does not reflect a thoughtful assessment of the nature of the information that should be available at the critical lease sale stage of the process, and is a significant step in the wrong direction. With respect to analyzing natural gas development, the draft SEIS contains little more than a justification of the analyses contained in the original EIS. BOEMRE's conclusion that natural gas development would have only minimal additive impacts suffers from significant flaws.

BOEMRE should take actions in the Arctic Ocean that are consistent with the Administration's commitment to science-based decision-making. It should ensure that the information required for informed decision-making is available, the systemic failures in regulatory oversight made evident by the *Deepwater Horizon* accident are addressed, and new decisions, including the decision whether to cancel, amend, or affirm Chukchi Sea Lease Sale 193, are made taking into account what we have learned. Accordingly, it must not finalize the draft SEIS as currently written, but should undertake a meaningful reanalysis of Lease Sale 193 that is consistent with NEPA, and the Administration's commitment to sound science in decision-making.

I. MISSING INFORMATION ANALYSIS

It is undisputed that there are significant gaps in basic information about the Arctic Ocean and that, absent this information, it is not possible, in many instances, to understand the scope of potential impacts from oil and gas activities on the region's wildlife and people. The need for more information has been acknowledged repeatedly by the Administration: in President Obama's National Ocean Policy process, the National Marine Fisheries Service's closure of the Arctic Ocean to commercial fishing, and in Secretary Salazar's initiation of a scientific gap analysis by the United States Geological Survey. The current draft SEIS clashes badly with the Administration's commitment to sound science in decision-making.

In the original Chukchi Sea Lease Sale 193 EIS, BOEMRE identified literally hundreds of instances in which it lacked information about the Chukchi Sea, ranging from basic science about the presence and behavior of species in the region to information about the effects of oil and gas activities on wildlife. However, it failed to analyze which of the missing information was relevant to reasonably foreseeable adverse impacts and essential to a reasoned choice among alternatives and to obtain that information absent a finding that the costs of obtaining the information are exorbitant. In *Native Village of Point Hope*, the Alaska Federal District Court ruled that this failure constituted a violation of 40 C.F.R. § 1502.22. The Court remanded the EIS to the agency and directed it to conduct this analysis as required by NEPA.

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(OCSLA)] to developing an offshore oil well: (1) formulation of a five-year leasing plan by the Department of the Interior; (2) lease sales; (3) exploration by the lessees; (4) development and production." *Sec'y of the Interior v. California*, 464 U.S. 312, 337 (1984). Each of the four stages presents the decision-maker with a different and distinct choice about offshore development. The five-year leasing plan is a programmatic evaluation of the nation's outer continental shelf areas to determine whether any of those areas should be open to potential future oil and gas lease sales in the coming five years. 43 U.S.C. § 1344(a). At the lease sale stage, BOEMRE decides whether to hold the scheduled sales and, if so, under what conditions. In the third stage, the agency reviews exploration plans submitted by an oil company and determines whether to allow the company to drill wells on the lease tracts purchased during the second phase. If it finds recoverable reserves, the company would submit a development plan, which is reviewed and approved or denied during the fourth and final phase.

Before a lease sale, the government has complete discretion over whether to permit oil and gas activity in an area included in a five-year plan and, if so, under what conditions to permit the activity. Once valid leases are issued, the government's options are much more constrained. Once they have obtained leases, companies may conduct ancillary activities on their leases, such as certain seismic surveying, without further approval from BOEMRE, and they may submit for approval exploration drilling plans and development plans. Further, by selling leases, the government sells a promise to the lessee that it will comply with the procedures and standards set forth in OCSLA in permitting the exploration and development of the leases. *Mobil Oil Exploration & Producing Se. v. United States*, 530 U.S. 604, 620-621 (2000) (explaining that "lease contracts g[ive] the companies more than rights to obtain approvals. They also g[ive] the companies rights to explore for, and to develop, oil."). Accordingly, once the government has lawfully issued valid leases, it can suspend activities on leases only for reasons and pursuant to the procedures set forth in OCSLA and its implementing regulations. These include a "threat of serious, irreparable, or immediate harm or damage to life (including fish and other aquatic life), to property, to any mineral deposits (in areas leased or not leased), or to the marine, coastal, or human environment," 43 U.S.C. § 1334(a)(1)(B), or when "necessary to carry out the requirements of NEPA or to conduct an environmental analysis," 30 C.F.R. § 250.172(d). Similarly, it can only cancel leases for reasons and following procedures set forth in OCSLA, 43 U.S.C. § 1334(a)(2)(A) & (B); *see also* 30 C.F.R. § 256.77(d), and cancellation entitles lease holders to compensation, 43 U.S.C. § 1334(a)(2)(C); 30 C.F.R. § 250.184.

BOEMRE must comply with NEPA at each stage of OCSLA offshore development process. Because the decision being made at each stage differs, so do the NEPA analyses. At the five-year plan stage, the analysis is relatively general in light of the programmatic nature of the decision. An analysis at the lease sale stage must examine more closely the impacts of oil and gas activities in a particular area. It must provide information to the decision-maker and the public about the consequences of oil and gas activities in a particular area and offer a reasonable range of alternatives. These alternatives must encompass the size and scope of the sale, including whether to defer certain areas from leasing, and the imposition of stipulations in the leases that limit or mitigate the effects of activities under the leases. Because of the nature of the decision at the lease sale stage—whether, where, and under what conditions to open areas to oil and gas activities—the analysis of potential impacts is different and more specific than the more general programmatic analysis at the five-year plan stage. The lease sale analysis is also relevant

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Section 1502.22 sets out an "ordered process" for an agency preparing an EIS in the face of missing information. *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1244 (9th Cir. 1984). When there is incomplete information relevant to reasonably foreseeable significant adverse impacts that is essential to a reasoned choice among alternatives, an agency must obtain and include the missing information in the EIS if the overall costs of obtaining it are not exorbitant. 40 C.F.R. § 1502.22. The regulation furthers NEPA's purpose of ensuring that agencies make "fully informed and well-considered decision[s] . . ." *Vi. Yankee Nuclear Power Corp. v. Natural Resources Def. Council*, 435 U.S. 519, 558 (1978), its mandate of "widespread discussion and consideration of the environmental risks and remedies associated with [a] pending project," and its "require[ment] that this evaluation take place *before* a project is approved." *LaFlamme v. FERC*, 852 F.2d 389, 398 (9th Cir. 1988) (internal quotation marks omitted).

The draft SEIS purports to respond to the Court's order to satisfy the requirements of Section 1502.22. However, BOEMRE's determination that none of the missing information is essential to a reasoned choice among alternatives is arbitrary and improper. Rather than engage in a good-faith effort to analyze the missing information and identify which of it is essential to a reasoned choice among alternatives, the agency appears instead to have spent its energy developing justifications for avoiding its obligation to obtain essential information. Appendix A of the draft SEIS contains a 140-page exposition of the instances in the original EIS in which the agency said "we don't know" about the Chukchi Sea and the effects of oil and gas activities there. For each instance of missing information, BOEMRE offers an arbitrary justification—usually one of the same five recurring excuses discussed below—for why it does not need to obtain the particular information before leasing in the Chukchi Sea. This approach is inconsistent with Section 1502.22 and the agency's obligation to reconsider the lease sale in light of a new analysis of missing information. Much of the missing information identified in the original Lease Sale 193 EIS is essential to the decision at issue—whether, when, where, and under what conditions to issue leases in the Chukchi Sea. The appendix demonstrates the agency's misdirection of resources into justifying an already-made decision, rather than engaging in a meaningful inquiry, real science, or research to inform a reexamination of the lease sale decision.

A. Because the decision to sell leases is a critical decision in the offshore development process, information relevant to the resources in the area and to the effects of oil and gas activity on those resources is essential to making that decision.

Because the lease sale stage involves concrete and consequential decisions about committing portions of planning areas to oil and gas activities, information about the biological function of different parts of the planning area and the importance of those parts to the regional ecosystem is essential to this choice. *See, e.g., Kettle Range Conservation Group v. U.S. Forest Serv.*, 148 F. Supp. 2d 1107, 1125-26 (E.D. Wash. 2001) (information is essential if without the data the agency cannot know if its conclusions regarding impacts are reliable). Similarly, understanding the effects of industrial oil and gas activities on different components of the ecosystem is essential to deciding where, if anywhere, those activities should be permitted and how they should be constrained.

A lease sale is a meaningful decision about the commitment of an area to oil and gas activity. It is the second of the "four distinct statutory stages [under the Outer Continental Shelf Lands Act

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to later-stage analyses, such as those conducted at the exploration stage. Typically, those analyses tier to and expand upon the lease sale analysis. In practice, moreover, BOEMRE has not obtained additional information at the post-lease exploration stage, because it has prepared only short environmental assessments, rather than full EISs, for these plans.

Thus, a lease sale decision is a meaningful commitment in OCSLA's staged offshore development process, and a meaningful NEPA analysis must provide information to the decision-maker and the public about the potential effects of oil and gas activities on the areas under consideration for leasing. As described more fully below, missing information about the basic biology of the Chukchi Sea ecosystem and the effects of oil and gas activities to the biological resources of the areas under consideration for leasing is essential to the lease sale decision.

B. Missing information identified in the original Lease Sale 193 EIS is essential to the lease sale decision.

In the draft SEIS, BOEMRE concedes that much of the information identified as missing in the 2007 Chukchi Sea Lease Sale 193 EIS was relevant to potentially significant effects of the lease sale. *See* BOEMRE, Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska, Draft SEIS, OCS EIS/EA BOEMRE 2010-034 (Draft SEIS) at App. A (Sep. 2010). However, it concludes that *none* of the information was essential to reasoned choices among alternatives, and thus the agency was not obliged to obtain the information. *Id.* at 10-11. That conclusion is unwarranted.

I. Missing information is pervasive and goes to fundamental questions at issue in the lease sale decision.

The missing information that forms the basis for the Court's remand includes the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals, and birds—which in other regions are typically the most well-studied segment of an ecosystem. The missing information includes the abundance, distribution, and life history characteristics for many of these species. The state of information about these more charismatic animals in the ecosystem is further evidence of the lack of information about the rest of the ecosystem, including the clams, worms, sea stars, and other species that are important prey for the more conspicuous species. The information that does exist is outdated and too spotty to provide an appropriate baseline for decision-making. This lack of basic information about the ecosystem makes it difficult, if not impossible, to determine whether there will be significant impacts to animals and the ecosystem. Additionally, there are substantial data gaps about the effects of oil and gas activities, like industrial noise, on marine mammals and fish. These gaps further limit the agency's ability to meaningfully analyze the impacts of the lease sale or chose among alternatives.

Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread across the Chukchi Sea, and this lack of information has been widely acknowledged. *See, e.g., NRDA – Coastal Response Research Center*, 2010. Natural Resources Damage Assessment

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(NRDA) in Arctic Waters: The Dialogue Begins. University of New Hampshire, Durham, NH; MBC Applied Environmental Sciences. 2007. Proceedings of a Workshop on Chukchi Sea Offshore Monitoring in Drilling Area OCS Study MMS 2007-002. Prepared by MBC Applied Environmental Sciences, Costa Mesa, CA for the U.S. Dept. of the Interior, Minerals Management Service, Alaska OCS Region) (MBC, 2007). Table 1 depicts by category some of the types of missing basic data about the Chukchi Sea ecosystem.

Type of Gap	Explanation	Examples of Gap
Resource	Some resources have not been studied in the Arctic or have very little basic, life history information.	Zooplankton, benthic organisms, fish
Abundance	For most species or species groups, there is little or no information on population size, relative abundance, and/or distribution. Furthermore, little is known about the ecological roles played by most species and thus which species are crucial for ecosystem health.	Zooplankton, Opilio crab, fish, ice seals, Chukchi polar bear population, Kittlitz's Murrelet
Spatial coverage	Many resources studied in depth still lack complete coverage across the Beaufort and Chukchi seas within the U.S. EEZ.	Benthic biomass, fish, Steller's Eider, pelagic birds, Arctic fox
Temporal coverage	Outside of remotely sensed satellite information (ice, temperature, chlorophyll-a, etc.), no resource in the Arctic has adequate data to detect change over annual or decadal time periods for the Beaufort and Chukchi seas.	Invertebrates, fish, pelagic birds, and mammals (surveyed in Beaufort only)
Seasonal coverage	Most surveys occur in July and August when weather, sea ice, and snow are optimal for human observers; direct observation is difficult at other times of the year. Most species lack adequate seasonal distribution data.	Invertebrates, benthic organisms, fish, polar bear, ribbon seal
Ecosystem Structure and Functioning	The physical, chemical and biological processes that help drive the composition of the food web, energy flow and spatial variability are not well understood.	Quantitative food web model, currents and winds, nutrient cycling, the effects of sea ice on productivity And species distribution
Applied research including understanding how the ecosystem is changing	Arctic marine ecosystems are poorly known to begin with, and are now changing in a myriad of ways. There is need for greater understanding of organismic and ecosystem-level responses to changes due to loss of sea ice, increased water temperature and acidification.	Effects of ocean acidification on benthic invertebrates, which are key part of the larger food web. Cumulative effects of disturbance and noise on bowhead whales and other marine mammals.

In addition to missing basic information about the ecosystem, including the species and relationships, we also lack a basic understanding of the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the Gulf spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur. See, e.g., Nuka Research

and Planning Group, LLC, Pearson Consulting LLC. 2010. Oil spill prevention and response in the U.S. Arctic Ocean: Unexamined risks, unacceptable consequences. Commissioned by the Pew Environment Group, U.S. Arctic Program, November 2010. Philadelphia, PA, USA, available at <http://oceansnorth.org/arctic-oil-spill-report>. For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information about the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the lease sale draft SEIS.

These broad areas of missing data about the basic ecology of the Chukchi Sea and the effects of oil and gas activities there render BOEMRE unable to answer questions that are essential to the decision about whether, where, when, and under what conditions to lease an area for oil and gas activities. Listed below are some examples of the types of questions essential to the decision.

- Where will Pacific walrus be during summer? In 2007 and 2009, walrus hauled out on land in large numbers in northern Alaska. Prior to 2007, walrus spent summers on sea ice in the Chukchi Sea. In 2010, a number of walrus hauled out along the U.S. Chukchi coast, yet a number of walrus also used the region around Hanna Shoal, which is squarely within the Lease Sale 193 area, extensively. Without knowing where walrus will be, infrastructure and activity cannot be positioned to avoid incidental takes and other impacts. See e.g., USGS 2010. *Walrus tracking and telemetry data acquired from walruses instrumented on the Alaska shores of the Chukchi Sea in September 2009*. Radio-tagging field report. USGS Alaska Science Center, Walrus research project, available at http://alaska.usgs.gov/science/biology/walrus/pdfs/EC09_Radio_Tagging_Field_Report.pdf; Jay, C.V. and A.S. Fishbach. (2008). *Pacific walrus response to Arctic sea ice losses*. U.S. Geological Survey Fact Sheet 2008-3041, available at <http://pubs.usgs.gov/fs/2008/3041/>.
- Which areas in the Chukchi Sea are crucial for various life stages of marine mammals? Satellite telemetry has shown that the movements of bowhead whales, beluga whales, walrus, spotted seals, ringed seals, bearded seals, and polar bears are more complex and variable than previously anticipated. Without an understanding of which areas are crucial and why, it is impossible to identify critical areas that must be avoided by development and protected in the event of oil spills.
- How have distributions of marine birds changed since the pelagic surveys conducted in the mid-1970s to mid-1980s in the Outer Continental Shelf Environmental Assessment Program (OCSEAP)? For birds at sea, these data are now at least 25 years out of date and much has changed since. Previous data point to the importance of areas overlapping the lease sale area in the Chukchi Sea. Furthermore, because of a lack of baseline information, there is very little knowledge about long-term trends and variation due to climate change [(CRRC 2010)]. In the Proceedings of the Northern Oil and Gas Research Forum held in Anchorage in October 2008, the forum acknowledged the importance of long-term studies compared to observations made at "a single point in time" and their usefulness. See http://alaska.boemre.gov/reports/2008rpts/2008_1028_proceedings.pdf.

- What are the distributions and life histories of species that are critical in marine food webs and how will loss of sea ice influence these species? Many marine birds and mammals rely on species like Arctic cod, yet there is a paucity of even basic knowledge about this species. Other of these species, such as Arctic cisco, are also very important for subsistence purposes. According to the environmental assessment on the recent Arctic Fishery Management Plan, sampling of fish and shellfish species is extremely limited, with only a small area of the Beaufort Sea off Barrow sampled adequately within the last 18 years. Some areas have never been sampled to determine even basic abundance estimates.
- How do the effects of climate change and industrial activity interact and are the effects cumulative?
- How will the distribution of species of concern (including ESA candidate or listed species) shift due to climate change? Species currently in the Chukchi may shift their ranges and key habitat areas. Species from the Bering Sea and farther south may move northwards, possibly requiring new areas or types of protection in the Chukchi Sea. The ability to reasonably predict such shifts is necessary to evaluate the life-cycle impacts of offshore development and infrastructure.
- How can quantitative risk and impact assessments be conducted? There is insufficient information about the distribution and productivity of plankton, benthic organisms, fishes, seabirds, the response of marine mammals to noise, ecological changes likely to be caused by sea ice loss, and other basic environmental parameters to support quantitative evaluation of potential and actual impacts from offshore activity, including oil spills. Without such information, risk and damage assessments are reduced to speculation or experts' opinions and recovery from an oil spill or other accident cannot be determined. Lack of an adequate quantitative baseline of information was the primary impediment to assessing ecological damages caused by the *Exxon Valdez* oil spill.
- What trajectories would spilled oil follow? The general atmospheric and circulation patterns of the Chukchi Sea have been mapped, but patterns and variability at the scale of an oil spill are not well known and are difficult to predict based on current understanding. In addition while general circulation patterns are known, there is relatively little understanding of the currents at the ocean's surface where the majority of oil collects in a spill. Without that knowledge, the placement of response equipment and the ability to respond promptly are hindered, reducing the ability to contain and recover spilled oil. Furthermore, there is insufficient information or monitoring capacity to project fine scale trajectories of spilled oil in real time to be projected in real time during a spill event, making it difficult or impossible to respond quickly and protect critical wildlife habitat areas, such as Kasegaluk Lagoon or Ledyard Bay.
- How can negative social and cultural impacts be avoided? Industrial development can disrupt traditional practices, interfere with cultural norms, and lead to social dislocation. Proper planning can help minimize such problems, but requires detailed understanding of local cultures and societies as well as the involvement of local communities in all phases of decision-making. The processes for such involvement have not yet been devised and tested for offshore oil and gas in U.S. Arctic waters. See Wernham, A. 2007. Inupiat health and proposed Alaskan oil development: Results of the first integrated health impact assessment/environmental impact statement for proposed oil development on Alaska's north slope. *Ecohealth* 4:500-513.

Because BOEMRE has not obtained any new information for this draft SEIS, it has left these and other questions unanswered, as they were in the original EIS. In light of the important decisions being made at the lease sale stage, as described above, the answer to these questions and others like them, are essential to the agency's choices at this stage.

During the remand, BOEMRE should obtain missing information to answer these and other important questions about the Chukchi Sea and the impacts of oil and gas development there. As discussed below and in the attachments, the most effective way to do this would be to engage in a comprehensive gap analysis, taking into account the ongoing United States Geological Survey effort, potentially supplemented by information from other federal agencies with expertise in the Arctic such as the National Oceanic and Atmospheric Administration, and then to undertake a comprehensive, coordinated, and integrated study plan to obtain essential missing information with which to analyze effects and make sound management decisions.

2. Missing information is essential to the choice among the alternatives identified in the original EIS.

The original EIS illustrates that the kind of information missing in the Chukchi Sea is essential to the choice among alternatives. BOEMRE "carried forward" the range of alternatives it analyzed in the original 2007 lease sale EIS in the draft SEIS. Draft SEIS at 12. It dismisses the importance of the missing information for choosing among these original alternatives. However, as several examples below illustrate, much of the missing information is essential to the reasoned choice among the original four alternatives in the 2007 analysis:

- Information about bowhead whale use of the Chukchi Sea is incomplete. The original EIS acknowledges that data on bowhead use of the Chukchi Sea are dated, provide only limited insight into areas where bowheads may be exposed to oil and gas activities should they occur, and "should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales . . ." Draft SEIS, App. A at 21 of 143; see also Draft SEIS at 25 of 143 (noting that "recent data on distribution, abundance, or habitat use in the Chukchi Sea Planning Area are not available"). The original EIS acknowledges further that, even were distribution and use patterns better understood, the significance of bowhead use of areas to the overall food requirements of the population are not clear. See Draft SEIS, App. A at 24 of 143.

The original EIS's alternatives consisted of different sized coastal deferral zones. These different zones were proposed in part to provide different levels of protection for bowhead whales. See Minerals Management Service (MMS), Chukchi Sea Planning Area, Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea, Alaska, Final EIS, OCS EIS/EA MMS 2007-026 (FEIS) at ES-7-8 (May 2007) (explaining reasons for each alternative). Indeed one alternative, Alternative IV, was developed specifically to afford protection to migrating bowhead whales. *Id.* at ES-8. Given the reason for positing the various alternatives—to offer, among other things, varying levels of protection for the bowhead whales—information that would allow BOEMRE to analyze the importance of the deferred areas to the species is essential to the choice among those alternatives.

- The original EIS for Lease Sale 193 acknowledged that information about marine and coastal birds is outdated or completely lacking for the Chukchi Sea. Draft SEIS, App. A at 4 of 143 (noting that several areas historically documented to be important for birds, as well as the entire lease sale area “lack site-specific data on habitat-use patterns, routes, and timing to assess impacts”); *id.* (noting that for many species, “the most recent data is between 15 and 30 years old, making accurate analysis difficult”). Yet, “several species or species-groups have a high probability of experiencing substantial negative impacts” and “[t]he risk that several regional bird populations could experience significant adverse impacts is high” in the event of an oil spill. *Id.*

BOEMRE proposed one of the alternatives, Alternative III, at least in part to reduce impacts to marine and coastal birds. See FEIS at ES-8. Given the reason for the alternative, information about areas that are important to marine and coastal bird species, and information about how and when those birds use these areas, is essential to making a choice between this and other potentially less-protective alternatives.

In the face of missing information, BOEMRE was left in the original EIS to speculate about the different effects among alternatives. For example, the original EIS states that in Alternatives III and IV, “[t]he increased distance between offshore development and coastal bird habitats would *conceivably* decrease the percent chance of spilled oil contact, increase weathering of spilled oil prior to contact, and increase available spill response time.” FEIS at IV-269, 273 (emphasis added); *id.* at II-42, 45 (“The increased distance between offshore development and coastal bird habitats also would *conceivably* decrease the percent chance of spilled oil contacting bird habitat”) (emphasis added). The alternatives analysis is replete with this sort of conjectural differentiation among alternatives. Conjectural language is used to describe different effects from oil spills on fish, fish habitat, bowhead whales, other marine and coastal birds, and terrestrial mammals. FEIS at IV-268-69 (Alternative III); *id.* at IV-272-73 (Alternative IV); see also *id.* at II-41, 45 (“Differences in noise and oil-spill effects to bowhead whales from this deferral compared to Alternative I [] and Alternative III/IV [] are difficult to quantify, but qualitatively can be described.”); *id.* at II-42, 45 (“any spill that would occur would *conceivably* take longer to reach and enter the spring-migratory route”); *id.* (“The increased distance between offshore development and coastal habitats also would *conceivably* decrease the percent chance of spilled oil contact with marine mammals”); *id.* at II-44 (“The increased distance between offshore development and coastal fish habitats also would *conceivably* decrease the percent chance of spilled oil contacting fish resources”); *id.* at II-41 (noting that “[i]n theory” Alternative III provides more protection for coastal and marine fish habitat). Because better information would enable BOEMRE to perform an actual, rather than a conjectural, analysis of the differences among potential alternatives, it is essential to a reasoned choice among alternatives.

3. Missing information is essential to determining an adequate range of alternatives.

Missing information is essential to the choice among alternatives, because it is essential to the agency’s definition of an adequate range of alternatives. NEPA requires that an EIS contain a detailed statement of the “alternatives to the proposed action.” 42 U.S.C. § 4332(C)(iii). The

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and wildlife, subsistence, and cultural resources” and to provide at least one action alternative that “ensure[s] development can occur without significant impacts to critical resources”—is clearly essential to a choice among alternatives.

In the draft SEIS, BOEMRE concludes that the effects under all the action alternatives presented in the original EIS are basically the same. Draft SEIS at 11 (noting the “commonality of potential impacts and their severity among all action alternatives, which substantially reduced the utility of incomplete information to the decision-maker”); see also FEIS at ES-8 (noting that “[t]he EIS analysis concludes that for most resources, while the alternative [III and IV] would provide a measure of protection to the resources within the deferral area, the effects to the resources in the Chukchi Sea area under this alternative would be essentially the same as the effects under Alternative I.”). This conclusion, if true, which it is not,¹ suggests only that the range of alternatives in the original EIS was inadequate. It highlights, rather than excuses, the essential nature of missing information to the choice among alternatives.

For example, BOEMRE stated in the original EIS that information about beluga whales was both important for the lease sale decision and missing from the analysis. It stated that “[u]nderstanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures.” FEIS at IV-163. But, “[l]ate-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified” *Id.* Rather than obtaining this information acknowledged in 2007 to be important to planning lease sales, BOEMRE in the draft SEIS attempts to excuse itself from that work with general boilerplate language. See Draft SEIS, App. A at 99 of 143 (stating that “[w]hile additional information on the distribution and timing of movements of belugas would be useful, this information is not essential to a reasoned choice among alternatives in this case” because “[m]uch information is already known on the general habits of the many species of birds [sic] that use the Chukchi Sea” [and] “this level of available information is sufficient to support sound scientific judgments and reasoned managerial decisions regarding formulation and selection of lease sale alternatives” and “[t]he protections that this species receives under the MMPA will serve to preclude or reduce impacts under all action alternatives”). These generalizations are not credible attempts to comply with Section 1502.22 with respect to information the agency itself has admitted is important for the decision-maker. As described in the next section, BOEMRE’s rationales do not justify the agency’s course.

C. BOEMRE’s reasons for not to obtain any missing information are arbitrary.

BOEMRE advances five recurring excuses for its decision not to obtain a single piece of information during the remand period. A key BOEMRE excuse for this extraordinary decision, that is both explicit and implicit in several rationales, is that missing information is not essential to the lease sale decision, because that decision is not a consequential commitment of areas to oil

¹ The original EIS does acknowledge generally some differences in effects to a number of species among the alternatives. See FEIS at IV-268-69. However, as described above, the real problem is that there is not enough information about the biology of the region or effects of oil and gas activities on its wildlife to determine whether the different alternatives will in fact have different effects or to fashion different alternatives that will in fact ensure different effects if chosen.

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discussion of alternatives “is the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. That discussion should “provid[e] a clear basis for choice among options by the decisionmaker and the public.” *Id.*; see *City of Angoon v. Hodel*, 803 F.2d 1016, 1020 (9th Cir. 1986) (“[T]he touchstone for our inquiry is whether an EIS’s selection and discussion of alternatives fosters informed decision-making and informed public participation.”) (*quoting California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982)). BOEMRE has chosen not to reexamine the range of alternatives for the lease sale in the draft SEIS process. The agency should reconsider this approach. As agencies and conservation groups explained in commenting on the original EIS, missing information about the basic biology of the region and about the effects of oil and gas activities on the species that inhabit it is essential to framing an appropriate range of alternatives that have meaningfully different effects. Without this information, neither the agency nor the public could determine whether the range of alternatives presented in the original EIS was adequate. The lack of information, in other words, thwarted the discussion of alternatives to the proposed lease sale, undermining a central component of the NEPA analysis.

The original EIS alternatives consist of three different-sized deferrals of coastal areas from leasing (the first of which, Alternative I, is inconsistent with the 25-mile coastal buffer zone mandated by the 2007-12 Five-Year Leasing Program, pursuant to which Lease Sale 193 was to be held, and is thus not a viable alternative). Because so much information about the Chukchi Sea is missing, however, it is impossible to determine whether these alternatives would have a different effect on the environment much less describe to a decision-maker why and how. The Environmental Protection Agency (EPA) identified this flaw, commenting on the draft of the original EIS:

Alternatives to the Proposed Action that are presented in the Draft EIS include two variations of exclusion areas along the coastward side of the Planning Area. However, it is unclear how the boundaries of the excluded areas in the two alternatives (Alternatives III and IV) were determined. Due to the lack of information about the Planning Area, the use of the “Opportunity Index” and other assumptions regarding the potential level of exploration, development and production activity as a result of a lease sale, it is unclear if the two alternatives, together with the Proposed Action and a No Action Alternative, represent a range of reasonable alternatives in the Draft EIS. The Final EIS should present a more thorough discussion of the decision criteria and the geophysical, biological and subsistence information that was used to develop the alternatives in order to demonstrate that a range of reasonable alternatives was considered.

FEIS at 013-002. EPA also suggested that BOEMRE “consider removal of additional areas with sensitive fish and wildlife, subsistence, and cultural resources, and at a minimum, deferring areas until further research and studies are conducted to ensure development can occur without significant impacts to critical resources.” FEIS at II-4. BOEMRE rejected these suggestions, in part because EPA did not provide specifics as to areas that should be considered for removal. *Id.* at II-5. EPA, of course, could not do so, given the lack of information in the Chukchi Sea. Absent adequate information, it is not possible to frame a meaningful range of alternatives for the decision-maker. Missing information that would allow the agency to frame alternatives that provide meaningful choices—namely information sufficient to identify “areas with sensitive fish

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and gas activities. Thus, information can be obtained at later stages of the OCSLA process, when the agency is evaluating exploration or production plans.

As an initial matter, this rationale ignores the agency’s practice, which has been to conduct only abbreviated environmental assessments of exploration plans and to rely heavily in that review on the analyses the agency conducts at the lease sale stage. See MMS, Shell Gulf of Mexico, Inc., 2010 Exploration Drilling Program, Chukchi Sea OCS, Alaska, Environmental Assessment at 6-7 (December 2009); MMS, Shell Offshore Inc. 2010 OCS Exploration Plan, Camden Bay, Alaska, Environmental Assessment at 2-3 (October 2009). Under this practice, the need to gather information is always either pushed into the future or deemed unnecessary in light of past NEPA documents.

More fundamentally, BOEMRE’s excuses fail to recognize the importance of the decision being made at the lease sale. As described above, at the lease sale stage, BOEMRE makes the decision about whether to permit oil and gas activities in an area, and the existence of leases, once issued, considerably constrains the agency’s discretion to alter course. BOEMRE can, of course, deny lessees’ exploration and development plans, and it can suspend and even cancel leases after they are issued. But these actions may only be taken in compliance with the substantive and procedural constraints of OCSLA and its regulations. It is precisely at the lease sale stage—where the agency finds itself now—when it has full discretion to determine if, when, where, and how oil and gas activities may occur in a planning area, that information about the biological resources of an area and the effects of oil and gas activities on those resources is essential.

BOEMRE also misapprehend its obligation under NEPA in preparing the draft SEIS. The job of the SEIS is to inform the decision-maker and the public about the effects of the decision to offer oil and gas leases in the Chukchi Sea. To satisfy this obligation, BOEMRE must “prepare a ‘detailed statement’ covering the impact of particular actions on the environment, the environmental costs which might be avoided, and alternative measures which might alter the cost-benefit equation . . . to aid in the agencies’ own decision making process and to advise other interested agencies and the public of the environmental consequences of planned federal action.” *Calvert Cliffs’ Coordinating Comm., Inc. v. U. S. Atomic Energy Comm’n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971). “[T]he purpose of an [EIS] is to . . . produce an informed estimate of the environmental consequences.” *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) (quotation and citation omitted), and give the decision-maker a “clear idea how to visualize the environmental harms” of the proposed action, *Mass. v. Watt*, 716 F.2d 946, 949 (1st Cir. 1983).

Similarly, BOEMRE states that, although large quantities of data are missing about the Chukchi Sea, there is enough information available now for informed management and decision-making. Draft SEIS at 11. This excuse is unsupported. In most instances, BOEMRE makes this statement without pointing to the information that it relies on to make its management decision notwithstanding important data gaps. For example, the original EIS states that there is not enough information to determine whether or not there will be significant effects to marine mammals from oil and gas activities under the lease sale. FEIS at V-32. Yet, in the draft SEIS, without disputing the fact that it is unable to determine whether there will or will not be significant effects to marine mammals from oil and gas activities in the Chukchi Sea and without

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pointing to any specific information at all, BOEMRE concludes that there is nonetheless enough information now to make management decisions. Draft SEIS, App. A at 136 of 143. BOEMRE's statement boils down to a conclusion that it is not essential to the lease sale decision to know whether oil and gas activities that will result from the decision will or will not significantly affect Chukchi Sea marine mammals. This conclusion is not credible. It underscores the agency's abnegation of its NEPA duties to describe in detail the "the actual impact of proposed projects," *Earth Island Institute v. U.S. Forest Serv.*, 442 F.3d 1147, 1172 (9th Cir. 2006), in an EIS "to obviate the need for [] speculation by insuring that available data is gathered and analyzed prior to the implementation of the proposed action." *Found. for N. Am. Wild Sheep v. U.S. Dep't of Agric.*, 681 F.2d 1172, 1179 (9th Cir. 1982).

Relatedly, BOEMRE states that it need not obtain additional information because other environmental laws and regulations would preclude significant adverse effects on particular resources. Again, BOEMRE misapprehends its obligations under NEPA. An agency may not rely on the imposition of future mitigation measures to avoid analyzing the impacts of an activity in an EIS. See *S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) (holding EIS violated NEPA because it failed to analyze a project's air quality impacts in reliance on separate Clean Air Act permitting process); see also *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1381 (9th Cir. 1998) (holding EIS discussion of mitigation inadequate in part because it was "not clear whether any mitigation measures would be adopted"); *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 734-35 (9th Cir. 2001). Furthermore, where an EIS relies on mitigation measures to avoid discussing potential effects, the mitigation measures must "be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Neighbors of Cuddy Mountain*, 137 F.3d at 1380-81 (EIS violated NEPA where it failed to discuss "how effective the mitigation measures would be"); *Nat'l Parks & Conservation Ass'n*, 241 F.3d at 735 ("the impact of the proposed mitigation measures must be studied as part of the preparation of an EIS"). Neither the original EIS nor the draft SEIS discusses the future mitigation BOEMRE claims excuses analysis in any meaningful detail.

BOEMRE also states that it need not obtain further information about adverse impacts because it has disclosed that significant adverse effects would occur under certain circumstances, such as an oil spill, and further description of those effects is not necessary. Draft SEIS at 11. This excuse, however, fails to recognize the agency's obligation to prepare a "detailed statement" that provides the decision-maker and public with a "clear idea how to visualize the environmental harms." For example, the original EIS said in the context of discrete populations of fish: "Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected." FEIS at II-34. The draft SEIS responds to this statement as follows: "[i]t is well understood that the environmental impacts associated with a large oil spill could be quite severe. Rare species could be affected by such an event wherever [sic] they may occur throughout the lease sale area . . . the decision-maker already has sufficient information regarding the relative probability and various impacts of a large oil spill to allow a reasoned choice among lease sale alternatives." Draft SEIS, App. A at 2 of 134. Without information about what would happen in the event of an oil spill, including, for example, what species of fish might be extirpated, it is not possible for BOEMRE to create a detailed statement of the potential environmental harms that

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The draft SEIS also failed to include essential information that has been developed about the Chukchi Sea between the completion of the original EIS in 2007 and the present. This information is also included in attachment B. One example of an important study that is already available and provides information essential to the lease sale decision but that BOEMRE has ignored is Quakenbush, L.T., Small, R.J., and Citta, J.J. 2010. Satellite tracking of western Arctic bowhead whales. Final Report. OCS study BOEMRE 2010-033. Bureau of Ocean Energy Management, Regulation and Enforcement. 65 pp plus appendices. The study pertains to the bowhead whale—an important marine mammal for the Inupiat along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the Endangered Species Act. The original EIS acknowledges that "[d]ata are limited on the bowhead whale fall migration through the Chukchi Sea before the whales move south into the Bering Sea," and that "[r]elevant data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available." FEIS at III-51, III-55. The Quakenbush study identified important corridors for migration and potentially important feeding areas in the Chukchi Sea, information BOEMRE admits is missing and admits is relevant to potentially significant impacts from leasing. Draft SEIS, App. A at 25 of 143. BOEMRE should consider the information provided by these and other studies, such as recent walrus tagging data from the United States Geological Survey, that are already available but that it has neglected to incorporate into its analysis of Lease Sale 193 effects.

E. BOEMRE should reassess its approach, obtain essential missing information, and reconsider the lease sale decision in light of the new information.

BOEMRE should not finalize the draft SEIS as currently written. It should take a new approach and undertake a meaningful assessment of whether missing information is essential to a reasoned choice among alternatives, obtain the information that is, assess whether the new information merits different alternatives, and fully reconsider the Chukchi Sea lease sale in light of that new information.²

The most effective way to respond to the Court's order and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This information will allow managers to move from qualitative assertions (*i.e.*, educated guesses) to making quantitative assessments of potential impacts. Information will allow decision makers to weigh the costs and benefits of industrial activities and determine whether there are alternatives that could allow for development while protecting the ecosystem and subsistence way of life. Obtaining information

² In public meetings on the draft SEIS, BOEMRE repeatedly stated that it has been instructed by the Alaska Federal District Court to complete its remand analysis by January 21, 2011. This statement is misleading. Although the Court stated its opinion that a "reasonable goal" for completion of the remand analysis would be January 21 and directed the agency to make reasonable efforts to respond to the remand by that date, it was careful to state that it was not "imposing" rigid or arbitrary constraints on the Agency and explicitly "recognize[d] the Agency's expertise in the field." *Native Village of Point Hope*, Docket No. 171 at 1-2. Accordingly, the Court instructed the agency to file a report with the Court as to the agency's progress by January 21, 2011, if that date proves unrealistic to complete consideration of the issues on remand. BOEMRE should not use this date as an excuse to avoid conducting the analysis that is required under NEPA and Section 1502.22

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could result from the lease sale and to provide the decision-maker and public with a clear picture of the potential impacts.

Finally, BOEMRE states that there is a "commonality" of effects among all action alternatives which "substantially reduced the utility of incomplete information to the decision-maker." Draft SEIS at 11. As an initial matter, and as discussed above, the statement is not true—the original EIS acknowledges that there are differences among alternatives. The problem is that data gaps prevent meaningful distinction among those alternatives. Part of the problem is that the lack of information has led managers to consider the environment as being basically homogenous, which would be unprecedented for a continental shelf region with varying currents and topography (*i.e.*, shoals and canyons). Regions are likely to vary in their importance for a number of species. For example walrus appear to congregate regularly in the region around Hanna Shoal within the lease area. See, USGS 2010. *Walrus tracking and telemetry data acquired from walruses instrumented on the Alaska shores of the Chukchi Sea in September 2009*. Radio-tagging field report. USGS Alaska Science Center, Walrus research project. http://alaska.usgs.gov/science/biology/walrus/pdfs/EC09_Radio_Tagging_Field_Report.pdf. If information is lacking to allow BOEMRE to determine whether oil and gas activities will have significant effects on marine mammals, for instance, there is no way to describe in any detail the effects of any one alternative, let alone describe differences among different alternatives. Additionally, the statement ignores the comparison that the decision-maker must make between the action alternatives and the no-action alternatives. It also begs the question whether, if it is true that effects are the same for all alternatives, the original EIS presented an adequate range of alternatives.

D. Other flaws in BOEMRE's analysis of missing information in the draft SEIS.

The draft SEIS suffers from a number of other flaws in its analysis of missing information. Exhibit 129 to the plaintiffs' opening brief in *Native Village of Point Hope*, upon which BOEMRE purports to rely at least in part for its identification of missing information in Appendix A to the draft SEIS, identifies missing information related to threatened spectacled and Steller's eiders. These identifications of missing data were contained in a biological evaluation that BOEMRE prepared in connection with its consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act. BOEMRE relied on the analyses in that biological evaluation in the original EIS. Thus, these unknowns must be addressed here in the draft SEIS.

The draft SEIS fails to include essential information that has been developed about the Chukchi Sea that BOEMRE itself has developed. This information includes information collected from the BOEMRE Environmental Studies Program in Alaska. The listing is available at: http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf (last visited Nov. 21, 2010). For example, attachment A documents those references from peer reviewed literature produced under the auspices of the study program since 1990 that BOEMRE failed to consider. BOEMRE must consider these studies, as some of these studies may contain information relevant to unknowns about species and habitats as well as the fates and effects of oil and gas exploration and development on these species and habitats.

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now would also ensure that, if leases were sold, there would not be an information gap later in the process, when the agency is called upon to analyze and approve exploration and development plans on those leases. We are attaching hereto, as attachment C, a draft research plan that sets forth one possible approach to obtaining missing information that would be true to the Administration's commitment to science-based decision-making.

Once it has obtained missing information and completed a meaningful reanalysis of the potential effects of Lease Sale 193, BOEMRE should, as it recognizes, Draft SEIS at 4 ("When the EIS process is completed the Secretary per the court's remand will affirm or change the department's previous Sale 193 decision."), make anew its decision whether to cancel, modify, or amend the decision to hold Lease Sale 193. To protect the integrity of the administrative process and avoid "bureaucratic rationalization and bureaucratic momentum," BOEMRE and the Department of Interior must not lend weight to the existence of outstanding leases in the Chukchi Sea—the prior decision to hold the lease sale must "count for nothing" in the present decision regarding Lease Sale 193. *Northern Cheyenne Tribe v. Hodel*, 851 F.2d 1152, 1157 (9th Cir. 1988).

II. ANALYSIS OF NATURAL GAS DEVELOPMENT

The draft SEIS's analysis of the effects of natural gas development also falls short in a number of respects. It fails to adequately take into account climate change, its scenario is unjustifiably limited, its dismissal of liquefied natural gas (LNG) tankering is unjustified, it fails to adequately analyze the impacts of pipelines, it fails to adequately analyze the effects of natural gas production on a number of species, and it fails to analyze the potential for activities to displace subsistence users.

A. The draft SEIS fails to adequately take into account climate change.

The draft SEIS, like the original Lease Sale 193 EIS, fails to assess adequately the lease sale's impacts in the context of Arctic climate change. It is essential that the final SEIS analyze the effects of gas development and production in light of Arctic climate change because the draft SEIS states that "the timeframe for all activities . . . could span 50 years," and assumes that gas-related activities will occur during the latter portion of that period. Draft SEIS at 65. The Arctic at the time natural gas will be developed according to BOEMRE's scenario will be a very different place than the Arctic of 2010.

The Arctic is undergoing rapid change. It is warming faster than any other place in the world. Among the most profound changes are the loss of sea ice, the melting of permafrost, and coastal erosion. As temperatures continue to rise and precipitation patterns change, species distributions will shift, and many species will experience increased stress and decreased chance of reproduction and survival. The listing of the polar bear due to warming-related habitat loss exemplifies the changing Arctic environment. Polar bears are spending more and more time on land and less time on ice where they hunt for prey, including seals. As a result, scientists predict that two-thirds of the world's polar bear population could disappear by the middle of the century. The future looks similarly grim for walrus. Walrus are benthic feeders that use the ice as a platform from which to dive for food. Without sea ice, food will become much more difficult to access, leading to malnutrition and increased energy expenditures in searching for food.

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The original Lease Sale 193 EIS failed to adequately take into account climate change. The EIS analyzed the proposed action against a static baseline and ignored likely changes in the Arctic climate and environment. *See, e.g.*, FEIS at III-47-55 (establishing the baseline for bowheads without accounting for climate change). As a result, the EIS included an incomplete analysis of climate change impacts to a number of rare and declining species, including polar bears, walrus, seals, and other marine mammals. FEIS at IV-145 – IV-171.

The draft SEIS makes the same error. It acknowledges that climate change is occurring. Draft SEIS at 32-33. Also, it indicates that changes in climate are irregular, making accurate projections difficult, but adds that “[c]limate change in the Arctic is projected to be larger than in other areas of the globe” *Id.* at 33. It recognizes that “[t]he arctic sea ice is undergoing changes in extent, thickness, distribution, age, and melt duration” *Id.* at 34. However, the draft SEIS fails to analyze the effects of Arctic gas production and development in the context of a changed and likely stressed environment.

Scientists predict that over the 50-year time frame of the lease sale activities, the Arctic could warm by more than three degrees Celsius as compared to a 1981 – 2000 baseline. ACIA, Arctic Climate Impact Assessment 2005, Cambridge University Press at 122 (Table 4.3), available at <http://www.acia.uaf.edu/pages/scientific.html>. As described above, Arctic warming will dramatically affect the Arctic environment and Arctic species. BOEMRE cannot provide a complete analysis of the effects of gas development and production without considering these changes. Thus, the final SEIS must account for the fact that in future decades the Arctic will be much different than it is today. The final SEIS’s analyses of effects to Arctic species, including marine mammals, polar bears and walrus, terrestrial mammals, and birds, should account for factors like diminished habitat, food resources, or population levels, and increased competition from species expanding their ranges into the Arctic.

BOEMRE should also analyze the impact of natural gas development’s contribution to black carbon emissions, for example from increased vessel traffic and development infrastructure. Black carbon is generally regarded as the second most important contributor to Arctic warming after CO₂. It warms the environment by absorbing solar radiation and heating the atmosphere, and it darkens snow and ice after falling to earth, thus increasing absorption and reducing the reflection of sunlight and accelerating melting. EPA Ad Hoc Working Group, Current Policies, Emission Trends and Mitigation Options for Black Carbon in the Arctic Region at 7 (April 28, 2009), available at <http://iiasa.ac.at/rains/reports/DRAFTWhitePaper-BCArcticMitigation-280909.pdf>. Emissions of black carbon from sources in the Arctic itself are particularly troubling, as Arctic emissions are far more likely to come in contact with and accelerate melt of Arctic snow and ice. *See id.* at 20. One recent study indicates that Arctic black carbon emissions are 10 to 100 times more important with respect to contributing to Arctic black carbon radiative forcing than emissions outside of the Arctic. Hirdman et al., Source identification of short-lived air pollutants in the Arctic using statistical analysis of measurement data and particle dispersion model output, 10 Atmos. Chem. Phys. 669 (Jan. 2010), available at <http://www.atmos-chem-phys.net/10/669/2010/acp-10-669-2010.pdf>. BOEMRE should analyze these effects.

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will end current conditions of oversupply and low price. *See* <http://www.alaskadispatch.com/dispatches/alaska-beat/88-alaska-beat/7471-ica-nat-gas-demand-to-rise-14-yearly-over-long-term>. Additionally, future attempts to mitigate climate change could further boost demand for natural gas because gas is a relatively clean fossil fuel when compared to oil.

Thus, it is reasonably foreseeable that natural gas leasing in the Chukchi Sea will result in additional exploration and development activities. BOEMRE’s failure to account for this in the draft SEIS is arbitrary, and the agency must remedy this omission in the final SEIS. The agency must consider the effects of additional exploration and development, such as noise disturbances to bowhead whales and walrus from increased seismic activities, drilling, and icebreaking, the increased risk of birds striking oil and gas structures, potential air and water discharges from natural gas drilling, and increased risk of a large oil spill occurring if natural gas development results in additional oil development.

C. BOEMRE’s dismissal of liquefied natural gas tankering is arbitrary.

As in the original Lease Sale 193 EIS, the draft SEIS arbitrarily fails to analyze the effects of LNG tankering. In the Lease Sale 193 EIS, BOEMRE refused to analyze the effects of LNG tankering by arguing that the method of bringing natural gas to market was not feasible or economically attractive, even though record evidence indicates that LNG tankering is not only feasible, but is also drawing industry interest. In the draft SEIS BOEMRE continues to ignore the record evidence indicating the potential for LNG tankering in the Chukchi Sea. Instead of grappling with this evidence, BOEMRE simply repeats its Lease Sale 193 EIS conclusion that LNG tankering is not feasible or economically attractive. Draft SEIS at 15.

BOEMRE should analyze the effects of LNG tankering. The record shows that LNG tankering, is a feasible option that BOEMRE has promoted and industry has shown an interest in. In the 2008 draft Multi-Sale EIS, BOEMRE stated that “LNG is a plausible . . . strategy to export gas from the Chukchi OCS.” Multi-Sale Draft EIS, App. E at E-6. In its presentations to the North Slope Borough on Lease Sale 193, BOEMRE indicated that LNG tankering was a possible development scenario. Chukchi Development Presentation at 5. Further, in commenting on [BOEMRE]’s Notice of Intent to prepare the EIS for Lease Sale 193, Shell recommended that in addition to effects of a gas pipeline, LNG tankering “should also be analyzed.” Shell E&P Company, Comments on Notice of Intent to Prepare an EIS on Proposed Chukchi Sea Lease Sale 193 at 2 (December 9, 2005).

An analysis of LNG tankering is essential because these activities could have substantial effects on the environment. The infrastructure and activities associated with LNG transport could affect large areas of the land and ocean. Facilities—including a major LNG plant—and activities on shore could disturb local species and destroy local habitat, including threatened and endangered birds. Also, LNG transport could significantly increase vessel traffic in the Chukchi and Bering seas. Increased noise from these vessels could harm pinnipeds and migrating bowhead whales, and disturbances of sea ice could have an impact on polar bears, walrus, and other species that depend on the ice for habitat.

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B. The Draft SEIS arbitrarily assumes no additional seismic or exploration drilling will occur in the natural gas development scenario.

In the draft SEIS, BOEMRE arbitrarily assumes that gas development and production would entail no additional seismic surveying or exploration drilling. Draft SEIS at 65. The scenario forms the basis of the agency’s analysis in the EIS. Thus, an arbitrary scenario infects the entire analysis of effects throughout the EIS. In the draft SEIS, BOEMRE has projected Chukchi Sea gas development and production in a manner that ensures effects will be essentially no different than the effects of projected oil development and production in the original EIS. Draft SEIS at 65.

BOEMRE’s limited gas scenario is arbitrary. BOEMRE assumes that gas development will result in no additional exploration activities because gas development will remain much less financially attractive than oil development. Draft SEIS at 65. However, even if gas development remains less attractive than oil development, this does not justify BOEMRE’s assumption that gas activities would not involve additional seismic surveying or drilling. Indeed, this assumption is contrary to the agency’s past statements on the attractiveness and probability of gas development. In the 2008 Multi-Sale Draft EIS, BOEMRE stated that an operational gas pipeline would “encourage new exploration, development, and production of natural gas throughout northern Alaska, including the Arctic OCS.” MMS, Beaufort Sea and Chukchi Sea Planning Areas, Oil and Gas Lease Sales 209, 212, 217, and 221, Draft EIS, App. E at E-4 (November 2008) (Multi-Sale Draft EIS) (stated in the context of discussing Beaufort Sea gas). Also, in the administrative record for Lease Sale 193 BOEMRE recognized that some companies could be even more interested in gas than oil in the Chukchi Sea and the agency noted that billions of dollars in royalties and taxes could be lost if companies did not develop marginal gas projects. Email from James Craig, BOEMRE, to John Goll, Re: Chukchi PNOs at 3 (March 19, 2007). A BOEMRE evaluation of Chukchi Sea lease sale scenarios plainly stated that “including gas development in the scenario will greatly increase potential environmental impacts *because the number of wells and platforms will be greater . . .*” Email from James Craig, BOEMRE, to Rance Wall, Re: My response to Shell’s request to change the Chukchi scenario at 3 (Dec. 13, 2005).

A pipeline stretching from the Chukchi Sea to the main transport hub near Prudhoe Bay may also provide an incentive to gas companies to perform additional exploration. The Chukchi Sea could contain considerable natural gas reserves. Multi-Sale Draft EIS, App. E at E-5, E-3 (stating that undiscovered gas resources in the Chukchi Sea range from 10.3-209.5 Tcf, while such resources in the Beaufort Sea range from 0.6-72.2 Tcf). While the gas may presently be less valuable than oil, the presence of a pipeline to transport gas to market could make any Chukchi Sea gas field commercially viable. This could cause companies to develop more gas, as well as oil found in the ground with the gas. It is arbitrary for BOEMRE to ignore this incentive and the possibility that a gas pipeline could transform the value of developing a gas and oil field from marginally unprofitable to lucrative.

Moreover, it is arbitrary for BOEMRE to assume that accessible gas will remain relatively unattractive well into the future. The International Energy Agency predicts that global demand for natural gas will increase 44 percent between 2008 and 2035, and that this increase in demand

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Vessels transporting the LNG to market through the Bering Sea could negatively affect the critically endangered North Pacific right whale, one of the most endangered whales in the world. It is essential that BOEMRE consider the possibility that boat strikes could result in mortality to right whales because the loss of any North Pacific right whale would be a significant effect.

Additionally, LNG tankering could greatly increase Arctic emissions of black carbon and contribute to Arctic warming. BOEMRE should analyze these effects.

Thus, given the feasibility of LNG tankering, MMS’s own promotion of the technology during the process leading to the original Lease Sale 193, industry interest in it, and the potentially significant impacts of LNG tankering, BOEMRE must include an analysis of the effects of LNG tankering in the final SEIS.

D. BOEMRE has not sufficiently analyzed the effects of the construction and operation of pipelines resulting from natural gas development.

The effects of a gas pipeline spanning from offshore in the Chukchi Sea to near Prudhoe Bay have never been analyzed. Neither the original Lease Sale 193 EIS nor the draft SEIS adequately analyzes the potential effects of a hundreds-mile long pipeline traversing diverse habitat for caribou and other species in across the National Petroleum Reserve—Alaska (NPR-A).

As an initial matter, the original Lease Sale 193 EIS’s analysis of an oil pipeline does not provide the necessary analysis of the effects of a gas pipeline. Even if the gas pipeline travels the same corridor as the oil pipeline discussed in the original EIS, the later time frame BOEMRE has identified for gas development will result in the construction of the gas pipeline at a later date. Also, a second pipeline and additional compression facilities and maintenance activities will result in other effects, both individually and cumulatively with oil-related activities.

The final SEIS for Lease Sale 193 must consider the effects that a gas pipeline and its associated facilities and activities could have, in conjunction with oil production and development activities, on the Arctic environment. However, the draft SEIS provides no more than a cursory and incomplete analysis of the effects of the construction and operation of a gas pipeline. Instead of providing a detailed analysis, the draft SEIS relies on later analyses and permitting processes to identify and prevent environmental harms. *See, e.g.*, Draft SEIS at 81-82 (noting that the construction and operation of a pipeline is noisy and can disturb threatened and endangered whales, but relying on later analyses and permitting to identify and prevent impacts). This does not satisfy NEPA; BOEMRE must take a hard look at the environmental effects of the lease sale before moving forward. Information about the biological resources of an area and the effects of oil and gas activities on those resources is essential at the lease sale stage because it is at this stage that the agency has discretion to determine if, when, where, and how oil and gas activities may occur in a planning area. Thus, only now can BOEMRE consider the entire scope of the lease sale and how the action as a whole could affect the Arctic environment and have that analysis inform the agency’s decision making. At later stages, the agency will already be invested in particular courses of action, and its discretion may be more constrained.

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In particular, the draft SEIS does not sufficiently analyze the potential effect a gas pipeline over land could have on caribou. The agency provides only two sentences on this topic, concluding that an elevated pipeline will not prevent caribou movements and stating that “[p]ipelines without adjacent roads and vehicle traffic are not likely to affect caribou movements.” Draft SEIS at 89. BOEMRE should provide a more detailed analysis of the potential for onshore activities to disturb caribou, including a review of the potential for a natural gas pipeline to delay caribou movements and the effect that would have on caribou herds and individuals.

A large pipeline stretching across the NPR-A could have important adverse impacts. For example, the Bureau of Land Management (BLM) has considered the effects of smaller pipelines—ones stretching across only part of the NPR-A—in its EISs analyzing potential effects of different management strategies for the NPR-A. BLM, Northwest National Petroleum Reserve-Alaska, Final Integrated Activity Plan/Environmental Impact Statement (November 2003) (*available at* http://www.blm.gov/ak/st/en/prog/planning/npra_general/nw_npra/nw_npra_a_final_iap.html) (NW NPR-A IAA/EIS); BLM, Northeast National Petroleum Reserve-Alaska, Final Supplemental Integrated Activity Plan/Environmental Impact Statement (April 2008), *available at* http://www.blm.gov/ak/st/en/prog/planning/npra_general/ne_npra/northeast_npra_a_final.html) (NE NPR-A IAP/EIS). The BLM identified numerous potential adverse effects of even these much less extensive pipelines. The BLM indicates that onshore oil and gas activities, and especially roads, can displace caribou and reduce caribou densities for miles. NE NPR-A IAP/EIS at 4-161. Further, it states that “there could be reproductive consequences from extensive disruption of caribou [movement] during the insect-relief season.” *Id.* at 4-162. This is contrary to BOEMRE’s statement in the draft SEIS that caribou are tolerant of development and its conclusion that caribou are able to habituate to oil and gas activities. Draft SEIS at 90. The BLM has also identified particular problems with pipelines themselves. It states that snow drifts under a pipeline can block or interrupt caribou movements. NW NPR-A IAP/EIS at IV-193. It also indicated that parallel sets of pipelines can lengthen crossing delays, NE NPR-A IAP/EIS at 4-171, as can roads that are adjacent to a pipeline, especially when there is high traffic on the adjacent roads, NW NPR-A IAP/EIS at IV-193. In some cases, caribou “may be delayed in crossing a pipeline and road for several minutes or hours in period of heavy traffic.” *Id.* “[T]he energetic costs associated with such delays are unknown.” NW NPR-A IAP/EIS at IV-193.

Moreover, the final SEIS should provide a more comprehensive review of relevant research on the effects of oil and gas development on caribou. For example, in the draft SEIS, BOEMRE cites a study from 2000 indicating that onshore development and production have not resulted in population-level effects. Draft SEIS at 90. However, a later report from the National Research Council found that

[a]s a result of conflicts with industrial activity during calving and an interaction of disturbance with the stress of summer insect harassment, reproductive success of Central Arctic Herd female caribou in contact with oil development from 1988 through 2001 was lower than for undisturbed females, contributing to an overall reduction in herd productivity.

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encounters. BOEMRE recognizes that human-bear interactions can result in harassment of the bear, but fails to sufficiently consider the cost of such disturbances to the bear. *Id.* at 83-84. Of particular concern is the potential for these interactions to endanger the life of a human or a bear. For instance, a human-bear encounter may lead to injuries or deaths to workers or an urgent need to protect a worker that results in the killing of a bear. The final SEIS should provide a comprehensive analysis of these and other relevant potential effects to polar bears, and should consider such impacts in light of the changing Arctic climate and environment.

The final SEIS should also provide additional analyses of effects to walrus. BOEMRE acknowledges that “the potential for serious adverse impacts to individual or groups of walrus does exist.” Draft SEIS at 88, and has noted that the population of Alaskan Pacific walrus is likely in decline, FEIS at III-74; however, the draft SEIS provides only a very brief analysis of potential impacts to walrus. Draft SEIS at 88. As with the EIS’s analysis for other species, it assumes that later permitting processes and mitigation measures will prevent harm. *Id.* However, even the short analysis BOEMRE has provided shows this to be arbitrary. The agency states that aircraft overflights can result in mortality from trampling and the separation of cow-calf pairs, but argues that “BOEM’s minimum altitude requirements would preclude adverse impacts to walrus, to the extent that human safety considerations permit flying at this altitude.” *Id.* Thus, BOEMRE’s own analysis shows that human safety considerations may result in aircraft flying at an altitude that can startle walrus and cause walrus mortalities. In fact, low-ceiling clouds in the Arctic prevent compliance with the minimum altitude requirements with some frequency. However, BOEMRE essentially ignores this potential harm and refuses to analyze whether resulting injuries or mortalities could result in population-level effects. BOEMRE also states that vessels can cause walrus to abandon haulouts, but does not address further the potential for vessels to disturb walrus. BOEMRE should provide an analysis of the potential for vessel disturbances to harm walrus. The draft SEIS does not consider any other potential disturbances to walrus. However, as discussed *supra*, gas production and development will require the construction of offshore pipelines and likely will result in additional exploration and development activity. BOEMRE must remedy these deficiencies by providing a complete analysis of potential effects to walrus in the final SEIS that includes a discussion of all relevant impacts.

BOEMRE also has not sufficiently analyzed the effects of gas development and production on birds. Gas development and production will require an onshore facility and onshore and offshore pipelines. Draft SEIS at 86, and “could entail relatively large-scale activity . . .” *Id.* at 87. BOEMRE attempts to avoid substantive analysis by stating that later analyses and permitting processes will prevent impacts to birds. The agency should analyze the effects that disturbance could have on specific species of bird, including threatened and endangered species, and should not simply rely on conclusory statements of no significant impact, as it has done in the draft SEIS. Also, the draft SEIS fails to consider how increased predation due to predator attraction to natural gas operations will affect bird species, even though it also acknowledges that development infrastructure can increase concentrations of arctic foxes, which prey on birds and bird eggs. Draft SEIS at 86-87, 91. The final SEIS should analyze potential effects of increased predation.

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National Research Council, Cumulative Environmental Effects of Oil and Gas Activities on Alaska’s North Slope at 116 (2003).

BOEMRE also has not provided sufficient analysis of the effects the construction of a gas pipeline from offshore facility to shore would have on marine mammals. For instance, BOEMRE recognizes that noise from the construction of a gas pipeline can be quite loud, and as a result, can affect threatened and endangered whales. Draft SEIS at 81. The agency, however, states that because construction activities will be slow moving, the whales will be able to avoid the construction area and avoid harm. *Id.* The Draft SEIS also recognizes that noise from the construction of a pipeline can disturb seals, whales, and walrus, but provides only a minimal description of potential harm, and relies on later processes to prevent these harms. *Id.* at 87-88. This does not constitute the hard look NEPA requires. The agency mentions that harm may occur to these species, but fails to analyze the relevance of this harm. The agency states that whales will avoid pipeline construction, but does not discuss whether the construction will be excluding whales from important habitat and how this may affect individuals or the species. Similarly, while the agency presumes that harm to seals and walrus can be avoided, it fails completely to consider the potential for construction activities to occur near important habitat. In the final SEIS, BOEMRE should perform a complete analysis of the potential effects of the construction of a natural gas pipeline that takes into account the locations of important marine mammal habitat and the cost of excluding animals from that habitat.

E. BOEMRE fails to adequately analyze the effects of natural gas development on Arctic species.

BOEMRE has not adequately analyzed the effects gas development and production operations will have on various Arctic species. The review of the effects of these activities provides very little data or actual analysis to support the conclusions. BOEMRE in large part attempts to avoid the need to obtain data and to perform analyses by stating that analyses at later OCSLA stages can protect health, wildlife, and the Arctic environment. This is insufficient. BOEMRE must take a hard look at the impact gas operations will have on Arctic species, including birds, at the lease sale stage.

The draft SEIS fails to sufficiently consider impacts to polar bears. Significantly, the analysis fails to account for changes in the Arctic climate and ice extent and how this will affect polar bears. It states that “[d]uring the open-water season, most polar bears remain offshore on the pack ice.” Draft SEIS at 83 (quoting FWS 2009 Biological Opinion). The draft SEIS also assumes that vessel-bear interactions usually result in short-term behavior disturbances. *Id.* at 83. These assumptions ignore data showing that the disappearance of Arctic sea ice is forcing polar bears to spend increasing time in open water, and to travel farther to find prey species, such as seals. Vessels may encounter bears that are hungry and weak either on ice or in the open ocean; fleeing from a vessel may constitute a very harmful energetic cost to a weak polar bear, especially one that has already spent much time swimming in the open ocean. The draft SEIS’s analysis of disturbances to polar bears also fails to recognize that the melting ice is forcing bears to spend additional time on land, and that due to a lack of access to sea ice hunting habitat, many of these bears will be very hungry, and perhaps starving. Because oil and gas facilities can draw hungry bears, gas development and production could increase bear disturbances and human-bear

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F. BOEMRE fails to adequately analyze the potential for gas development and production activities to displace subsistence users.

The final SEIS should consider the potential for gas development and production activities to displace subsistence activities. The draft SEIS’s analysis of effects to subsistence-harvest patterns is largely restricted to the potential for activities to restrict access to resources through reductions in the resources themselves or changes in the distribution of those resources. Draft SEIS at 95-98. As detailed elsewhere, BOEMRE’s consideration of effects to Arctic species—including subsistence species—is lacking. However, beyond those issues, BOEMRE has also failed to consider the potential for gas development to displace subsistence users. BLM detailed some relevant subsistence displacement concerns in its Northeast NPR-A Supplemental IAP/EIS. Subsistence users have identified numerous reasons why they might avoid areas in response to industrial development. These reasons include a lack of cultural privacy, belief that resource are contaminated, reduced resource productivity in an area, and physical obstacles. NE NPR-A IAP/EIS at 3-135. Natural gas development resulting from Lease Sale 193 has the potential to result in large scale and far reaching industrial activities that could displace subsistence users from vast expanses of subsistence lands as occurred during development of the Prudhoe Bay region. See Wernham, A. 2007. Inupiat health and proposed Alaskan oil development: Results of the first integrated Health Impact Assessment/Environmental Impact Statement for proposed oil development on Alaska’s North Slope. EcoHealth 4:500-513. In the final SEIS, BOEMRE should analyze the potential for gas development and production to have such an effect.

III. NEW INFORMATION FROM THE DEEPWATER HORIZON SPILL

BOEMRE states in the draft SEIS that it need not consider the *Deepwater Horizon* spill in the Gulf of Mexico because it is beyond the scope of the remand. Draft SEIS at 16. Alternatively, BOEMRE states that the Gulf spill need not be incorporated into the Chukchi Sea lease sale analysis because (i) it has not changed baseline conditions in the Chukchi Sea, since it occurred in the Gulf of Mexico, (ii) it occurred in deep water and the Chukchi Sea lease sale area is predominantly shallow water, and (iii) “any change in likelihood of an oil spill from a blowout during exploration drilling would not alter the potential effects of the oil spill already analyzed” in the original EIS. *Id.* These reasons are unavailing, and BOEMRE should analyze new information from the spill that is still being developed by, for example, the Presidential commission on the *Deepwater Horizon* spill.

NEPA compels supplementation of environmental impact analyses when “there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” 40 C.F.R. § 1502.9(c)(1)(ii); *see also Idaho Sporting Cong., Inc. v. Alexander*, 222 F.3d 562, 566 n.2 (9th Cir. 2000). The events surrounding the *Deepwater Horizon* spill provide significant new information that requires BOEMRE to supplement its analysis of lease sale 193. *See, e.g.,* Council on Environmental Quality, Report Regarding the Minerals Management Service’s National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (Aug. 16, 2010), *available at* <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100816-ceq-mms-ocs-nepa.pdf> (stating “The BP Oil Spill constitutes significant new information and circumstances that may

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require reevaluation of some conclusions reached in prior NEPA reviews and other environmental analyses and studies"). Fundamentally, the oil spill in the Gulf shows that that large spills from exploration drilling can happen and that, even in the relatively benign conditions of the Gulf, they cannot be contained. These facts alone fundamentally undermine BOEMRE's assumptions about oil spills in the original EIS. In the original EIS, for instance, BOEMRE concludes that no oil spill would occur during exploration drilling. FEIS, App. A at A.1-1-A.1-2. Any oil spill would occur only during development and production. *Id.* The *Deepwater Horizon* spill shows that, even with the latest technology, oil spills do, in fact, occur during exploration. In addition, the spills analyzed in the original EIS—a 1,500 barrel oil spill from a production facility and a 4,600 barrel oil spill from a pipeline, FEIS at IV-19—are less than 1/1000 the size of the *Deepwater Horizon* spill—estimated by the Presidential commission investigating the *Deepwater Horizon* spill at close to 5,000,000 barrels of oil. See National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, *The Amount and the Fate of the Oil*, Draft, Staff Working Paper No.3 at 16 (Oct. 6, 2010). The original EIS does not analyze a large blowout spill. In light of the *Deepwater Horizon*, BOEMRE cannot dismiss a blowout spill as not reasonably foreseeable. In addition, BOEMRE must supplement its analysis of oil spill prevention and containment to reflect the lessons being learned from the spill and its aftermath, including the effects of dispersants.

CONCLUSION

BOEMRE should not finalize the draft SEIS in its current. With respect to missing information, BOEMRE should reassess whether there is essential missing information, taking into consideration the ongoing United States Geological Survey analysis of Arctic data gaps. It should obtain information that is essential to a lease sale decision, most effectively by engaging in a comprehensive and integrated research program. It should then prepare a revised draft SEIS that analyzes Lease Sale 193 in light of this new information. With respect to its analysis of natural gas development, BOEMRE should revise its assumptions and improve its analysis as described above. Once it has prepared an adequate and informative draft SEIS, it should make the document available for public comment. Thereafter, the agency should consider anew in light of this new information whether to cancel, modify, or affirm its decision to hold Lease Sale 193.

Respectfully,

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Table of Attachments

	Description
A	Peer Reviewed Publications for MMS Funded Projects (1990-Present) missing from the SEIS and FEIS for Chukchi 193
B	List of recent studies that should be considered in the SEIS
C	A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning (DRAFT)

Attachment A

Peer-reviewed Publications for MMS Funded Projects (1990-Present) missing from the SEIS and FEIS for Chukchi 193 (http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf)

- Barber, W.E., R.L. Smith, M. Vallarino and R.M. Meyer. 1997. Demersal Fish Assemblages of the Northeastern Chukchi Sea, Alaska. *Fishery Bulletin* 95:195-208.
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Attachment B

List of recent studies that should be considered in the SEIS

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Attachment C

A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning

Introduction

The United States is at a crossroads with respect to planning and decision-making for offshore oil and gas activities in the Chukchi and Beaufort seas. President Obama and the Department of the Interior (DOI) must decide whether to continue with plans and approvals that are based on inadequate science and have generated controversy, litigation, and—as the blowout in the Gulf of Mexico demonstrates—the potential for environmental and social disaster. This document and the attachments provide a path forward that would use a comprehensive, integrated scientific research and monitoring plan to fill the gaps identified by scientists and courts and provide the necessary baseline information from which to make effective decisions.

At the heart of the controversy about offshore drilling in the Arctic is the widely acknowledged lack of scientific information about the Arctic Ocean. While we do know that the Arctic Ocean is important to life in coastal communities, has regions of high productivity that support varied ecosystems with iconic species of wildlife, helps regulate the planet's weather and climate, and is changing rapidly, scientists know very little about how the Arctic Ocean functions or the ways in which it might respond to stresses from industrial activities. The lack of baseline information about the marine ecosystem was one of the bases for court decisions invalidating the 2007-12 Five-Year Leasing Program and Lease Sale 193 in the Chukchi Sea. Without this understanding, it is not possible to comply with statutory and regulatory mandates that were established to help ensure responsible stewardship of resources, including the Outer Continental Shelf Lands Act (OCSLA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA)

Moreover, the lack of baseline information creates a significant impediment to both effective planning and preparedness. The U.S. Commission on Ocean Policy stated as a principle tenet, "Ocean managers and policy makers need comprehensive scientific information about the ocean and its environment to make wise decisions."¹ The final recommendations of the Interagency Ocean Policy Task Force (OPTF) call for science-based decision making and a better understanding of our ocean ecosystems, including a special emphasis on the Arctic.² The Obama administration implemented the final OPTF recommendations and has both the opportunity and obligation to obtain the necessary science and use it to guide decisions about industrial activities.³ By deferring future leasing in the Chukchi and Beaufort seas, calling for the U.S. Geological Survey Arctic (USGS) gap analysis, committing to science in the NOAA Arctic Strategic Plan, and creating the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the Obama administration has taken important steps toward allowing for comprehensive science and planning. At the same time, the government is in the process of determining how to respond to the court-ordered re-evaluation of Lease Sale 193 and the 2007-12 Five-Year Leasing Program, and Congress is debating legislation that includes provisions for better science in the Arctic.

The most effective way to respond to the courts' orders and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This research has not been done adequately before, and much of what has been done is decades out of date in a region that is changing rapidly. While it is true that DOI and industry have undertaken significant research, those efforts have been narrowly focused, applied

¹ U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century* (2004) at 374, available at <http://www.oceancommission.gov>.

² See Council on Environmental Quality, Final Recommendation Of The Interagency Ocean Policy Task Force (July 2009) at 6, 39-40, available at http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

³ Exec. Order No. 13547, 75 Fed. Reg. 43023 (2010).

information about the rest of the ecosystem, including the clams, worms, sea stars and other species that are important prey for the more conspicuous species.

The lack of baseline science has also been highlighted by several other prominent local and federal agencies as well as international forums. In its comments on the Draft Proposed 2010-15 Five-Year Leasing Program, NOAA recommended using a precautionary approach to oil and gas activities for the Chukchi and Beaufort seas that prevents those activities until more information is available to support sustainable management.⁴ The Arctic Climate Impact Assessment, an international project of the Arctic Council and the International Arctic Science Committee, highlighted basic surveys and monitoring as well as ecosystem-based research as some of the highest priority research actions needed for Arctic marine waters.⁵ Further, the North Slope Borough has called for better baseline science to guide decisions, and Senator Begich has introduced legislation that calls for additional Arctic research and coordination.⁶

Moreover, where basic information about the marine ecosystem exists, much of it is old, spotty, and too sparse. For example, the Environmental Assessment for the Arctic Fishery Management Plan states that "data were scarce for estimating the abundance and biomass of fishes in the Alaskan Arctic."⁷ The review of potential data sources indicated that surveys for fish have occurred about every 15-20 years, but typically over different regions. Even if those surveys over the past 60 years were combined together (which would be inappropriate due to different sampling methodologies and other reasons), there are still major areas of the U.S. Arctic Ocean shelf region that have yet to be surveyed. These areas include those where commercial fisheries could reasonably be expected to develop and those within lease sale areas.

Additionally, the vast majority of existing studies have been conducted in summer months. We need a year-round understanding of the Arctic Ocean ecosystem. One stunning example of this is a seabird, the spectacled Eider. In the summer their population would be widely dispersed, but in the winter, the entire world's population gathers together in a small area of the northern Bering Sea. If studies on this bird were only conducted in the summer, it would result in erroneous conclusions about the impacts of activities on this species, especially if activities occurred at or near their winter gathering area.

In addition, the Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impact statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Much of the environmental data input to the model is old; for example, current and wind information dates from 1979-1996. More sophisticated models are available and better information would allow for more effective analysis of the risks from spilled oil.⁸

While significant resources have been dedicated to studying particular Arctic animals and potential impacts to those animals from offshore oil and gas activities, we still lack critical baseline information about the ecosystem. The only studies designed to provide the comprehensive information and understanding of the health, biodiversity, and functioning of Arctic marine ecosystems and the potential impacts of industrial activities were conducted 30 years ago pursuant to the Outer Continental Shelf Environmental Assessment Program (OCSEAP). The information gained under that program did not initially cover the Chukchi Sea lease area and is so outdated as to be of very limited use in making decisions now for the Beaufort Sea.

⁴ See Letter from Jane Lubchenco, Ph.D. to S. Elizabeth Birnbaum, Re: Comments on the Interior Minerals Management Service Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015 (Sept. 9, 2009), at 5, available at http://www.peer.org/news/news_id.php?row_id=1265.

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⁶ See S. 1562, 111th Cong. (2010).

⁷ Arctic FMP EA at 99.

⁸ These problems are explained in more detail in Attachment 3 to this document.

studies designed to answer individual questions. Similarly, the National Science Foundation has funded significant cutting edge, hypothesis-driven basic research. While these efforts bolster our understanding of some processes in limited areas, they have not been conducted at the scale necessary to provide the holistic understanding of the ecosystem needed to make wise decisions about if and how industrial activities should proceed. Nor have they been conducted year-round—almost all of the existing studies focused solely on the summer months. The needed information is best obtained through year-round monitoring (including sampling for species distributions and abundance) and interdisciplinary research to elaborate trophic relationships, ecosystem structure and functioning, and other interactions.

Moving from uncoordinated studies to planned, integrated research would provide the necessary information, affordably, in a reasonable amount of time. In fact, the USGS gap analysis study, which has already started, could be the initial step. The results of that study—which should identify some of the largest and most pressing information gaps—should be used to help design the research program. The largest and most important information gaps almost certainly could be filled in 5-7 years for approximately \$20 million annually. Given the \$2.7 billion in revenue generated from Lease Sale 193 alone and the immense risks from oil and gas activities, this cost is neither exorbitant nor unwarranted. Such a comprehensive plan would provide many of the answers to the unknowns identified in the court proceedings relevant to Lease Sale 193 and the 2007-12 Five-Year Leasing Program and would provide the necessary information to make informed decision about whether to allow industrial activities and, if so, under what conditions.

State of Science About the Arctic Ocean

Very little is known about the Arctic Ocean, and in particular the Chukchi Sea. According to the U.S. Arctic Research Commission, the Arctic is "the least studied and most poorly understood area on Earth."⁹ In particular, "The Arctic Ocean is the least well known ocean on the planet. We know more about the topography of the planets Venus and Mars than we do about the bathymetry of the Arctic Ocean."¹⁰ Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. We recognize that the recent losses of sea ice during summer are fundamentally changing these ecosystems, but we still know little about the abundance and distribution of common species much less how the food webs work in this region.¹¹

As part of the Lease Sale 193 litigation, the plaintiffs compiled a 38-page appendix of quotations from the Environmental Impact Statement that recognize the lack of available information about the Chukchi Sea.¹² These citations are explicit recognitions by DOI and NOAA that there is significant missing information about even the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals and birds—which in other regions are typically the most highly studied animals of an ecosystem. The missing information for these species includes abundance, distribution, and life history. This lack of basic information makes it difficult, if not impossible, to determine whether there will be significant impacts to the animals and the ecosystem. The state of information about the more charismatic animals in the ecosystem is further evidence of the lack of

⁹ U.S. Arctic Research Commission, Report on Goals and Objectives for Arctic Research at "A Message from the Chair" (2005), available at <http://www.arctic.gov/files/USARReportOnGoals2005.pdf>.

¹⁰ *Id.* at 6-7.

¹¹ See Arctic Climate Impact Assessment, IMPACTS OF A WARMING ARCTIC 8, 10, 14-15, 24, 58-61 (2004); National Marine Fishery Service, Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis For the Arctic Fishery Management Plan And Amendment 29 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs 79-90, 99-105, 192, available at <http://www.fakr.noaa.gov/analyses/arctic/earir/fra/0809/final.pdf>. (hereinafter "Arctic FMP EA").

¹² This appendix is Attachment 2 to this document.

Since the conclusion of the OCSEAP program, DOI's studies in the Arctic Ocean have not been guided by an overarching monitoring and research plan. Instead, research priorities over the past several decades have been guided by an assumption that enough was known about the basics. DOI, therefore, focused "on topical studies in smaller areas to answer specific questions and fill identified information needs."¹³ These applied research questions are important and have led to a better understanding of specific issues, such as the fall bowhead whale migration route through the Chukchi Sea. However, without continued monitoring of key parameters studied in OCSEAP it is now unclear if the base of information gained remains valid. Climate change has altered the region dramatically over the last 30 years and ecosystems have significant variability on yearly to decadal spans.

Thus, DOI stopped examining and monitoring the fundamentals and, instead focused on applied research without even tying those studies together in a framework or committing to update results. As a result, population and distribution data for several vulnerable species that play important roles in the marine ecosystem are either outdated or missing. For example, Arctic cod, which is potentially the most important fish species in this ecosystem, is indicated to be present throughout all of the U.S. EEZ, but no seasonal variation, concentration, or spawning area data are published at this time.¹⁴

The lack of comprehensive planning may account, at least in part, for conflicting statements made by DOI—first through the Bureau of Land Management then Minerals Management Service and now Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)—about the state of science in the Arctic. On the one hand, DOI has acknowledged repeatedly both that it lacks basic scientific information and needs good information for decision making.¹⁵ On the other hand, the agency points to the fact that it has spent \$350 million on research since 1973 across Alaska's 15 OCS planning areas and, therefore, has a substantial understanding of the Arctic Ocean.¹⁶ The agency also has argued in court that the research undertaken gives it a sufficient basis for making decisions.¹⁷ The references in the Lease Sale 193 EIS discussed above about the lack of basic information for species runs directly counter to any assertions by DOI or BOEMRE that there is a broad base of information available for the Arctic from which to make decisions.

The National Science Foundation (NSF) also has funded important basic research in the Arctic Ocean. That research has been hypothesis-driven, meaning that it was designed to answer specific, cutting-edge scientific questions, including those about the specific impacts and feedbacks of climate change. While this cutting-edge research is important, it does not provide the basic, baseline information that is critical for making decisions, including what species live there, how many of them are there, and do those populations change from place to place and season to season. Much of that information simply is not available for the Arctic Ocean.

Similarly, industry has invested in significant scientific research, some of which may address important missing information. Currently, however, the results of those studies are not reliable because the data from industry studies are generally not made available publicly, and the degree to which other information about industry research is shared varies from study to study. Given the lack of transparency and the obvious conflict of interest for industry that would not want to share information that could potentially hinder development, there is a substantial risk of bias in the information that is shared. Unless

¹³ See Alaska Annual Studies Plan Final FY 2011 3 (October 2010), available at <http://alaska.boemre.gov/ess/ess/sp2011.pdf>.

¹⁴ See Arctic FMP EA at 79, 99, and 201; B. Bluhm & R. Gradinger, *Regional variability in food availability for Arctic marine mammals*, 18 Ecological Applications 577-596 (2008).

¹⁵ See <http://www.doi.gov/whatwedo/energy/ocs/AlaskaRegion.cfm> (stating that the Arctic Ocean requires "additional scientific, environmental, and spill risk analysis before new areas are offered for leasing."); see also Attachment 2 to this document detailing unknowns in Lease Sale 193 EIS.

¹⁶ See Alaska Annual Studies Plan Final FY 2011 at 1.

¹⁷ See *Native Village of Point Hope, et al. v. Salazar, et al.*, 1:08-cv-00004 (RRB), Fed. Def. Opp'n Br. at 12-17.

all data and methods for all research projects are made available to the public, it is impossible to give selective results credence in the decisions about oil and gas activities.

Ultimately, when considered with the long list of studies performed over the last 15 years, the 38-page index of recognized unknowns about the Lease Sale 193 area is indicative of a systemic problem with the way research is being conducted in the Arctic. As a result of the narrow focus on applied research questions, while baseline research and monitoring is ignored, large sums have been spent to provide information about specific issues without providing decision-makers the information needed to make informed decisions about Arctic resources. One or two specific studies will not solve this problem. Rather, a more holistic research program is needed to fill the important information gaps related to almost every aspect of the ecosystem.

An Interdisciplinary, Integrated Research and Monitoring Program for the U.S. Arctic Ocean

At this point, it is incontrovertible that there are: substantial information gaps about Arctic marine ecosystems, a laundry list of studies that have been conducted, ongoing processes at BOEMRE in response to court orders to supplement the Lease Sale 193 EIS to better account for missing science and to revise the environmental sensitivity analysis and 2007-12 Five-Year Leasing Program; and a commitment by the new administration to bring science back to decision-making. President Obama and his administration must establish a path forward that harmonizes this situation and provides the basic information required to protect the resources of the Arctic, including the subsistence way of life. The most efficient way to accomplish these goals is through another OCSEAP-type program limited to the Beaufort and Chukchi seas

To provide the basic information required to protect the resources of the Arctic, including the subsistence way of life, and to guide decisions about oil and gas and other industrial activities, a new comprehensive research and monitoring program should:

1. integrate existing information to give a more holistic picture of what is known and conduct an analysis of the gaps in information to determine the most pressing research and monitoring needs;
2. gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations;
3. track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways;
4. secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem structure and functioning, and effects of anthropogenic perturbations;
5. study potential ecological and sociological impacts; and
6. integrate these scientific data to identify Important Ecological Areas as well as processes and habitats that are sensitive and vulnerable to perturbation, and furnish a basis for marine spatial planning.

This program could easily be conducted in three simple phases over the next 5-7 years: 1) gap analysis and planning (2011-2012); 2) research and monitoring (2013-2016, with monitoring continuing into the future); and 3) integrating new and older information to provide decision-makers the basic understanding needed to make effective decisions (2016-2017). Each of these phases must be informed by local and traditional knowledge, including planning and peer-review.

Phase I: Gap Analysis and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information and gaps in knowledge. Based on that information, a research program can be devised, with public input, to fill the gaps.

New research and monitoring should build on what has been learned about the Arctic Ocean already. Thus, the first step in this process is to reconcile the large information gaps with the important research that has occurred. Existing information should be compiled and integrated, then an analysis conducted of the gaps that are left. This gap analysis would then drive creation of an integrated research and monitoring program. The USGS Arctic studies initiative is an important step in this direction, and should be followed by a more comprehensive analysis as called for in Senator Begich's Arctic Ocean Research and Science Policy Review Act of 2009.¹⁸

President Obama and Secretary Salazar have directed the USGS to assess "resources, risks, and environmental sensitivities in Arctic areas."¹⁹ The USGS will complete an initial review of Arctic science and issue a report in April 2011 that will "examine the effects of exploration activities on marine mammals; determine what research is needed for an effective and reliable oil spill response in ice-covered regions; evaluate what is known about the cumulative effects of energy extraction on ecosystems and other resources of interest; and review how future changes in climate conditions may either mitigate or compound the impacts from Arctic energy development."²⁰ That report should set the stage for a more comprehensive analysis that forms the basis for implementation of the necessary studies and monitoring.

The USGS study is an important initial effort to gather existing information and identify gaps in knowledge, but it is likely not to be sufficiently comprehensive and inclusive to form the basis of the necessary research and monitoring program. Thus far, DOI has insisted on keeping the study firmly and fully in the control of the USGS and BOEMRE. Despite the important knowledge and experience within those agencies, their expertise clearly does not encompass the broad interdisciplinary breadth inherent in the more comprehensive undertaking needed. Experts are needed from many fields, from climate and oceanographic sciences to population biology and community ecology as well as the social sciences to determine the breadth of potential impacts to local communities. Second, the guidance given by DOI to USGS mandates consideration of four particular subject areas, which focuses their study towards a narrower applied research path rather than the holistic picture of Arctic information needs. Lastly, a gap analysis and research and monitoring plan should be developed with opportunities for public input and a peer review process that helps ensure the study accurately describes the state of, and existing gaps in, Arctic information.

Based on a comprehensive gap analysis, government scientists, together with public input, should define a research and monitoring plan to fill information gaps. In the aftermath of the *Exxon Valdez* oil spill a similar analysis and development of a research plan was put together with the benefit of hindsight to address the shortcomings of knowledge in Prince William Sound and the Gulf of Alaska that became apparent after the spill. The Gulf of Alaska Ecosystem Monitoring and Research (GEM) plan was designed to provide critical information for both quantitatively predicting the potential impacts of another spill and determining the impacts from another spill. The GEM plan should serve as a modern model for the type of plan needed to guide research and monitoring in the Arctic. The research and monitoring plan put together for the U.S. Arctic Ocean should be developed with input from the public and evaluated by an independent panel of experts.²¹

Phase II: Research and Monitoring

Once the information gaps are identified and a research plan devised, the research and monitoring must be executed. As the known gaps in knowledge outlined above show, scientific research and monitoring should include:

¹⁸ S. 1562, 111th Cong. (2010).

¹⁹ See Secretary Salazar Unveils Arctic Studies Initiative that will Inform Oil and Gas Decisions for Beaufort and Chukchi Seas, available at http://www.doi.gov/news/pressreleases/2010_04_13_releaseA.cfm.

²⁰ *Id.*

²¹ An outline for such a plan for the Arctic Ocean is included as Attachment 1.

1. Marine life assessment to provide a year-round picture of the species in each marine habitat and their population trends;
2. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biological factors, such as productivity and community richness and diversity;
3. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses;
4. Studies designed to identify patterns of subsistence use and changes in well-being as well as potential impacts from industrial activities; and
5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate sciences to social impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to better elucidate the processes that underlie the way in which the ecosystem functions.²² As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCSEAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities.²³ They were only able to do this by studying multiple aspects of the ecosystem simultaneously, including climate indices, sea ice concentration, water temperature, sedimentation, and seafood biomass. In addition to providing better information, this type of integrated research and monitoring is more cost effective because more information is elucidated than would be from individual studies.

ConocoPhillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing.²⁴ Their work indicates that the Chukchi Sea is not a homogenous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web to invertebrates, fish, birds and marine mammals.

This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic Ocean. ConocoPhillips's and Shell's research, however, is confined to areas around two of their drilling prospects during the open water season. With a concerted effort, this research could easily be expanded to the rest of the region and other seasons. Expanding this type of research and monitoring would provide decision-makers with the more complete picture needed to protect Arctic ecosystems and the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

²² Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact.

²³ J.M. Grebmeier, et al., *A major ecosystem shift in the northern Bering Sea*. 311 Science 1461-1464 (2006).

²⁴ See <http://doc.nprb.org/web/symposium/2010/2010%20AMSS%20Abstract%20Book.pdf> at 19-28.

Phase III: Data Integration

Once sufficient information is available from the research and monitoring outlined above, that information should be synthesized to demonstrate an understanding of ecosystem structure and functioning, including quantitative and robust models of the food web, and a determination of the important ecological areas of the region. Those models and information provide the basis from which to understand likely impacts of industrial activities and, accordingly, whether and how to allow them. Managers will be able to move from qualitative assertions (i.e., educated guesses) to making quantitative assessments of potential impacts and allow decision makers to weigh the costs and benefits of industrial activities and to find alternatives that could allow for development while protecting the ecosystem and subsistence way of life.

This new program would provide the answers to the unknowns identified in the Lease Sale 193 litigation by virtue of providing a basic understanding of the marine ecosystem. The missing information is broad in scope and covers major, fundamental components of the ecosystem. A comprehensive research and monitoring program, rather than ad hoc research will build this foundation of knowledge most efficiently.

In addition, having this basic information will avoid the problem that has arisen in the Gulf of Mexico, where development occurred with scant attention to the status of the ecosystem beforehand. As a result, we find ourselves wondering what was lost following development or an industrial accident because we did not evaluate what was there to begin with. Further, comprehensive, integrated research and monitoring could prevent that from happening in the Arctic, and a complete understanding of the ecosystem can drive response and restoration activities should an industrial accident occur.

Meeting Legal Requirements and Policy Goals

As explained above, an integrated, comprehensive research and monitoring program would be the most efficient way to provide the baseline necessary to make informed decisions about offshore oil and gas activities in the Arctic. Such a plan would build on the commitments to science already made by the administration and would be the most effective way to resolve the ongoing litigation and controversy.

Federal courts have invalidated the 2007-12 Five-Year Leasing Program and Environmental Impact Statement (EIS) for Lease Sale 193 in the Chukchi Sea. While the decisions rest on different grounds, the lack of scientific information about the Arctic Ocean. In the 2007-12 Five-Year Leasing Program that lack of scientific information resulted in an arbitrary analysis of the relative environmental sensitivity of marine areas. In the Lease Sale 193 context, the court found that the agency had not complied with a Council on Environmental Quality regulation, 40 C.F.R. § 1502.22, by failing to determine "whether missing information identified by the agency was relevant or essential" and then failing to determine "whether the cost of obtaining the missing information was exorbitant or the means of doing so unknown."

DOI has issued a draft proposed 2007-12 Five-Year Leasing Program and a Draft Supplemental EIS for Lease Sale 193. Neither document fully accounts for the missing information or makes an effort to put in place the necessary interdisciplinary, integrated research and monitoring. Both, however, are drafts, and DOI still has the opportunity to move forward in this way.

As explained above, there are 38 pages of references to scientific unknowns made by DOI and NOAA in planning for Lease Sale 193. The agency has an affirmative duty to get this information, including by performing research itself when necessary, if it is essential to its decision and not exorbitant in cost. Information is significant, essential, or important where without the information the agency cannot accurately assess the effects of various alternatives, the extent of certain problems, or the need for particular proposed actions.

Basic scientific information is essential at the lease sale stage. It is when BOEMRE evaluates alternatives about the size of the sale, deferral areas, and other limitations that may affect exploration and

development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. Information that would be gathered by a comprehensive research and monitoring effort would allow for more effective consideration of alternatives and better evaluation of potential impacts.

Additionally, at the lease sale stage, BOEMRE should undertake a more detailed analysis than was conducted for the Five-Year Leasing Program, based on better information. This analysis is particularly important given the agency's current practice of preparing an environmental assessment, rather than full EIS to evaluate proposed exploration activities. If the agency prepares a programmatic-level analysis based on incomplete information at both the Leasing Program and Lease Sale stages, no detailed evaluation will be prepared until development is scheduled to occur. Neither OCSLA nor NEPA contemplate such a result.

Nor, as it appears to have done in the Draft SEIS for Lease Sale 193 should BOEMRE rely on analyses to be conducted by other agencies pursuant to other statutory mandates. Rather, the agency should abide Secretary Salazar's commitment to science and lead the way toward a better understanding of the ocean ecosystem by working with other expert agencies to put in place a comprehensive research and monitoring program.

The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately \$100 million over 5 years. By comparison, Lease Sale 193 alone generated \$2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefit, but it also poses considerable risks, economic and otherwise, to the benefits provided by a healthy marine ecosystem.

These cost estimates are consistent with the other programs mentioned above. The GEM program was projected to cost \$120 million in 1999, and the OCSEAP program was estimated to cost \$25 million annually.

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in such an approach is to develop and implement a comprehensive research and monitoring program like OCSEAP. We simply do not know enough now to make good decisions about stewardship for the oceans and clean energy. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate; and if so, when, where and how such activities could be conducted.

Attachments

Number	Title
1	A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean (October 2010 Draft).
2	Compendium of Lease Sale 193 Unknowns – Exhibit 129 to Plaintiffs' Motion for Summary Judgment in <i>Native Village of Point Hope, et al. v. Salazar, et al.</i> , 1:08-cv-00004 (RRB) (Feb. 2009).
3	Major Problems With Oil Spill Models (October 2010 Draft).

Attachment 1

A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean

Compared with other marine ecosystems, very little is known about the living marine resources in the U.S. Arctic Ocean. We recognize that the recent losses of sea ice during summer are fundamentally changing the ways these ecosystems function, but we still know little about how these food webs work. Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. Permitting large-scale industrial activities in the absence of even basic knowledge of the composition and functioning of the marine ecosystem sets the stage for inadvertent environmental degradation at best, and catastrophic interactions at worst. The risks of adverse interactions are exacerbated by the rapid rate of environmental change in the Arctic, and our limited knowledge of existing resources and conditions makes it difficult even to detect ecosystem responses to change. The following science plan is intended as a guide toward systematically improving our knowledge of Arctic marine ecosystem structure and function.

The geographic scope of this science plan includes the exclusive economic zone (EEZ) of the U.S. Arctic Ocean, extending from the northern Alaskan coastline to the continental shelf break to the north, from the Bering Strait in the west to the Canadian border to the east. Most of the plan should be completed within four years. In recognition of the great scientific value of long-term data sets, however, the monitoring should be continued indefinitely, with at least a multi-decade planning horizon.

The essential elements of the plan are grouped into six categories: gap analysis, resource assessment, environmental monitoring, scientific process studies and synthesis. These elements are intended to (1) define existing information and research needs; (2) gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations, (3) track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways; (4) secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem functioning, and effects of anthropogenic perturbations; (5) study sociological impacts, and (6) integrate these scientific data to identify processes and habitats that are sensitive and vulnerable to perturbation and furnish a basis for marine spatial planning. Each of these constituent efforts must be informed by local and traditional knowledge (LTK) at all stages, including planning and peer-review.

I. Gap Analysis

- A. Conduct a comprehensive gap analysis to determine what scientific research is currently being done and what additional information is needed.

II. Marine Life Assessment

- A. Conduct a comprehensive survey of species occupying each marine habitat, including communities in the benthic, pelagic and littoral zones, and ice-associated communities. Whenever feasible these surveys should be conducted seasonally to identify migrations and patterns of periodic habitat use.

- B. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals and some fish). These assessments will provide crucial baselines for evaluating impacts of industrial development and ecosystem change.

III. Environmental Monitoring

- A. Establish a network of fixed monitoring stations to track physical forcings and local biological responses. This station network should be patterned along the lines of the National Science Foundation's Long Term Ecological Research Network (LTER) and NOAA's oceanographic buoys adapted to the US Arctic Ocean, with sampling stations allocated to both the Chukchi and Beaufort seas. These stations will measure physical factors in the ocean including temperature and salinity, acidity, alkalinity and nutrients as functions of seawater depth, along with current profilers at strategically chosen locations; atmospheric factors including surface temperature, wind speed and direction, insolation, gas composition, and particulate density and composition; and biological factors such as primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.
- B. Support remote monitoring by satellite and aircraft to track sea ice extent, surface albedo and ocean color in collaboration with NOAA, NASA and NSIDC.
- C. Establish a systematic process for incorporating LTK for early detection of unanticipated ecosystem change, and for review by LTK experts for accuracy and completeness.
- D. Periodically update the resource assessments identified in "II" above to track ecosystem responses to climate change and industrialization.
- E. Monitor detection of invasive species, including species displaced by warming seawater temperatures to the south, and exotic species introduced by industrial activities.

IV. Scientific Process Studies

- A. Identify processes strongly coupled with biological production, species' distribution and abundance, and support research that will improve understanding of them aimed at improving prediction of community responses to short- and long-term environmental stressors. This research should include identification of the species interactions that structure the biological community, which includes studies of the food web to determine linkages and energy flow through the ecosystem, as well investigations to determine the processes responsible for nutrient cycling.
- B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, including processes strongly affected by transition from light limitation to nutrient limitation resulting from continued sea ice loss, effects of warmer water temperatures on growth and provisioning requirements of selected target species (especially young-of-the-year and juveniles), and sensitivity to acidification from increases in atmospheric carbon dioxide.

V. Sociological and Ecosystem Impact Studies

- A. Identify historical and current patterns of land and subsistence use, and conduct a survey of social and psychological well-being in North Slope communities to document current conditions in these communities.
- B. Monitor changes in patterns of land and subsistence use, and in measures of social and psychological well-being in North Slope communities affected by oil development.
- C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, such as research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

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IN THE UNITED STATES DISTRICT COURT
 FOR THE DISTRICT OF ALASKA

NATIVE VILLAGE OF POINT HOPE, <i>et al.</i> ,)	
Plaintiffs,)	
v.)	Case No. 1:08-cv-00004-RRB
DIRK KEMPTHORNE, Secretary of the Interior, <i>et al.</i> ,)	
Defendants,)	
and)	
SHELL GULF OF MEXICO, INC., and CONOCOPHILLIPS COMPANY,)	
Intervenor-Defendants.)	

VI. Data Integration and Marine Spatial Planning

- A. Construct ecosystem models including a quantitative nutrient-phytoplankton-zooplankton (NPZ) model and an Ecopath model to evaluate how predicted ecosystem responses compare with data observed from the monitoring programs. Identified inadequacies will highlight areas requiring further research.
- B. Archive monitoring data in a publicly accessible database that is continuously maintained. Also, monitoring results should be periodically included in GIS maps to facilitate identification of Important Ecological Areas (IEAs) and important subsistence areas in the US Arctic Ocean and how they may change through time. Important Ecological Areas are geographically delineated areas with distinguishing characteristics that contribute disproportionately to an ecosystem's health or are particularly vulnerable to disturbance.
- C. Integrate the results of the monitoring and research described above with a marine spatial planning effort that identifies IEAs as well as all potential energy sources and their availability to markets to help minimize the likelihood of adverse consequences associated with industrialization.

DECLARATION OF COUNSEL

I, Erik Grafe, hereby declare:

- 1. I am one of the attorneys representing Plaintiffs Native Village of Point Hope, et al., in this action. I submit this declaration in support of Plaintiffs' opening brief.
- 2. Attached to this declaration as Attachment A is a compendium of statements made by the Minerals Management Service (MMS) in its Final Environmental Impact Statement

Native Village of Point Hope, et al., v. Kempthorne, et al.,
 Case No. 1:08-cv-00004-RRB

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(EIS) for the Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) (May 2007). This contains statements in the EIS acknowledging missing information about the Chukchi Sea environment and the potential effects of the lease sale 193 on wildlife and subsistence. This declaration was compiled by an Earthjustice staff member under my direct supervision and reviewed by me.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 29th day of January, 2009.

s/ Erik Grafe
 ERIK GRAFE

ATTACHMENT A

COMPENDIUM OF LEASE SALE 193 FEIS UNKNOWNNS

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LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

"Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that ice cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level." EIS at III-32.

"Despite these previous works, several data deficiencies remain. Information of current distribution and abundance (e.g., fish per square kilometer) estimates, age structure, population trends, or habitat use areas are not available for fish populations in the northeastern Chukchi Sea. Many fish studies reporting distribution and/or abundance are 20-30 years old. Other studies are still older. For example, the only survey of demersal fishes in the region is more than 20 years old. Fish assemblages and populations in other marine ecosystems of Alaska (e.g., Gulf of Alaska, Bering Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years; it is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action." EIS at III-32.

"Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species." EIS at III-33.

"Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and area reflect a pattern of temporally and spatially irregular and disjunct sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is unknown if the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Bering seas are considered

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to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northwestern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are very limited; most of the surveys/studies have been performed in coastal waters landward of the landward of 200-m isobath, with scant surveys having sampled deeper waters. . . . [R]obust population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare).... Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities; growth, reproduction, or survival rates within regional or local habitats; or productivity rates by habitat, essentially are unknown for fishes inhabiting waters seaward of the nearshore, brackish-water ecotone.” EIS at III-34 (internal citations omitted).

2. Neritic-Demersal Assemblage

“Life-history data for many of the demersal species using neritic substrates is lacking (e.g., whitespotted greenling, twohorn sculpin, spinyhook sculpin, veteran poacher); consequently, assessing the species resilience to perturbations is not feasible until additional information becomes available.” EIS at III-35.

3. Neritic-Pelagic Assemblage

“No species of this assemblage are assessed as being of low resilience, because life-history data are lacking.” EIS at III-35.

4. The Cryopelagic Assemblage

“Arctic cod and Pacific sand lance are assumed to be of medium resilience to exploitation; polar cod and toothed cod are data deficient such that an assessment of resilience is not feasible with available information.” EIS at III-36.

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II. MARINE MAMMALS

A. Whales

1. Bowhead Whale

“There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean.” EIS at III-45.

“Recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are lacking.” EIS at III-45.

“No data are available indicating that, other than historic commercial whaling, any previous human activity has had a significant adverse impact on the current status of BCB Seas bowheads or their recovery.” EIS at III-45.

“Conservation concerns include: . . . uncertain potential impacts of climate warming. . . .” EIS at III-45.

“The uncertainty of the stock structure adds some uncertainty to summaries of the status of bowheads that may be impacted by the Proposed Action.” EIS at III-45.

“[I]f whales become more ‘skittish’ and more highly sensitized following a hunt, it may be that their subsequent reactions, over the short-term, to other forms of noise and disturbance are heightened by such activity. Data are not available that permit evaluation of this possible, speculative interaction.” EIS at III-46 (quoting NMFS’ Arctic Region Biological Opinion).

“There is little information regarding causes of natural mortality for BCB Seas bowhead whales.” EIS at III-49.

“Little is known about the effects of microbial or viral agents on natural mortality [of bowheads].” EIS at III-49.

“The amount of feeding [by the BCB Seas bowhead stock] in the Bering Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002).” EIS at III-49.

“The MMS funded large-scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by Mel’nikov, Zelensky, and Ainana (1997), Moore (1992), Moore and Clarke (1990), and Moore, DeMaster, and Dayton (2000). We have plotted counts of bowheads in the Chukchi Sea during those surveys (Fig. III.B-4), because they visually provide limited insight into areas where bowheads may be exposed to oil and gas activities should they occur in the Chukchi Sea Planning Area.

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5. Oceanic-Demersal Assemblage

“Life-history statistics for most species covered in this assemblage are data deficient, chiefly for lack of fish surveys and studies in oceanic waters of the Alaskan arctic.” EIS III-36.

6. Diadromous Fishes

“A number of diadromous species in the region have complicated life-history patterns that are not fully understood.” EIS at IV-61.

7. Salmon

“Little is known of the movements undertaken during the 18 months the [pink] salmon spend at sea.” EIS at III-39 (quoting Schmidt, McMillan, and Galloway (1983)).

“Chum salmon fry, like pink salmon, do not overwinter in streams but migrate (mostly at night) out of streams directly to sea shortly after emergence. The timing of outmigration in the arctic is unknown, but occurs between February and June (chiefly during April and May) in more southern waters.” EIS at III-40.

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However, we caution against over-interpretation of these data out of context of survey effort and, because these data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales; they are the best data available.” EIS at III-50—51.

“Data are limited on the bowhead fall migration through the Chukchi Sea before the whales move south into the Bering Sea.” EIS at III-51.

“The amount of feeding in the Chukchi Sea and Bering Strait in the fall is unknown as is the amount of feeding in the Bering Sea in the winter (Richardson and Thomson, 2002). Richardson and Thomson (2002:xxxviii) concluded that: “. . .behavioral, aerial-survey, and stomach-content data, as well as certain energetics data. . .show that bowheads also feed widely across the eastern and central Beaufort Sea in summer and fall.” In mid- to late fall, at least some bowheads feed in the southwest Chukchi. Detailed feeding studies have not been conducted in the Bering Sea in the winter.” EIS at III-54.

“There are locations in the Beaufort Sea and the western Chukchi Sea where large numbers of bowheads have been observed feeding in many years. However, the significance of feeding in particular areas to the overall food requirements of the population or segments of the population is not clear.” EIS at III-55.

“Recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available.” EIS at III-55.

“[I]mportantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales.” EIS at IV-82.

“Bowheads are not randomly distributed throughout the Proposed Action area. The extent of use of particular habitats varies among years, sometimes considerably; therefore, it is difficult to predict, in advance of a given year, exactly how bowheads will use the entire area that is available to them. Some aspects of their habitat use are poorly understood. For example, current data are not available on which to typify the current summer use of the northern Chukchi Sea by bowheads. For example, in the Beaufort Sea in some years, large aggregations of bowheads near Smith Bay have been observed during MMS’ Bowhead Whale Aerial Survey Program (BWASP) surveys at the beginning of September. It is unclear if these animals are early migrants that have come from the east, if they summered in the northern portions of the Beaufort Sea and came south, or if they entered from the Chukchi Sea and never migrated east. . . . It is important to note that the Chukchi Sea data are not recent (1979-1991) and thus should not be interpreted as indicating current patterns of bowhead use of the Chukchi Sea.” EIS at IV-101.

“We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined.” EIS IV-102 (similarly at EIS at IV-105).

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"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

2. *Fin Whale*

"The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock." EIS at III-46. *See also id.* at III-56 (similar).

"There are no recent data to confirm their use or lack of use of the Chukchi Sea Planning Area, or adjacent areas to the south." EIS at III-47.

"There is little information about natural causes of mortality (Perry, DeMaster, and Silber, 1999a). The NMFS summarized that 'There are no known habitat issues that are of particular concern for this stock' (Angliss and Lodge, 2002, 2005). Perry, DeMaster, and Silber (1999a:51) listed the possible influences of disease or predation as 'Unknown.'" EIS at III-56.

"The importance of specific feeding areas to populations or subpopulations of fin whales in the North Pacific is not understood." EIS at III-57.

"The possible influences of disease or predation and of overutilization [on fin whales] are listed [by NMFS] as 'Unknown.'" EIS at V-28.

3. *Humpback Whale*

"Available information does not indicate humpback whales inhabit the Chukchi Sea OCS project area. There are no recent data to confirm their lack of use of the Chukchi Sea OCS Planning Area, or adjacent areas to the south." EIS at III-47.

"There is 'no clear consensus' (Calambokidis et al., 1997:6) about the population stock structure of humpback whales in the North Pacific due to insufficient information (Angliss and Lodge, 2002) (see further discussion in USDOl, MMS,2003a,b)." EIS at III-58.

"Angliss and Outlaw (2005) stated that: 'There are no reliable estimates for the abundance of humpback whales at feeding areas for this stock' (the Western North Pacific Stock) 'because surveys of the known feeding areas are incomplete, and because not all feeding areas are known.' There are not conclusive or reliable data on current population trends for the western North Pacific stock (Perry, DeMaster, and Silber, 1999b; Angliss and Outlaw, 2005)." EIS at III-59.

"Causes of natural mortality in humpbacks in the North Pacific are relatively unknown, and rates have not been estimated." EIS at III-60.

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7. *Minke Whale*

"There are no reliable estimates for the Alaska stock of minke whales. A provisional estimate was made for the Bering Sea of 810 individuals; however, this is not used for the Alaska stock because the entire stock's range was not surveyed." EIS at III-78.

B. Other Marine Mammals

1. *Seals*

"Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Bering/Chukchi Sea species known to be in decline. Accurate population estimates for ice seals are not available and are not easily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec. III.A.4, Sea Ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec. III.A.3, Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006)." EIS at III-71.

a. *Ringed Seal*

"No reliable estimate for the size of the Alaska ringed seal stock is available (Angliss and Outlaw, 2005) . . ." EIS at III-71.

b. *Spotted Seal*

"No reliable estimate for the size of the Alaska spotted seal stock is available (Angliss and Outlaw, 2005)." EIS at III-72.

c. *Ribbon Seal*

"Ribbon seals inhabit the North Pacific Ocean and the adjacent fringes of the Arctic Ocean. In Alaska, they range northward from Bristol Bay in the Bering Sea and into the Chukchi and western Beaufort seas. They are found in the open sea, on pack ice, and rarely on shorefast ice (Kelly, 1988). As the ice recedes in May to mid-July, they move farther north in the Bering Sea, hauling out on the receding ice edge and remnant ice (Burns, Shapiro, and Fay, 1981). Seal distribution throughout the rest of the year is largely unknown; however, recent information suggests that many ribbon seals migrate into the Chukchi Sea for the summer months (Kelly, 1988)." EIS at III-73.

"No reliable estimate for the size of the Alaska ribbon seal stock is available (Angliss and Outlaw, 2005)." EIS at III-73.

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"The threat of disease or predation [on humpbacks] as [sic] unknown." EIS at V-29.

4. *Gray Whale*

"[E]xisting information is insufficient to understand the dynamics of gray whales and offshore Chukchi Sea habitat relationships, quality and quantity dynamics and distribution of prey resources, or the capability of habitat to support (carrying capacity) long- and short-term whale use." EIS, Vol. II, AC 019-076.

"[T]he relationship between the expanding gray whale population to amphipod community dynamics is unknown but is of considerable interest." EIS at V-35.

5. *Beluga Whale*

"Understanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures. Late-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at IV-163. *See also id.* at III-77 (second sentence same).

"Based on recent telemetry studies on eastern Chukchi belugas, it is likely that members from both stocks occur in similar places and at similar times during the fall migration although the significance of this is unknown (Suydam, Lowry, and Frost, 2005)." EIS at III-76.

"Winter food habits of belugas are largely unknown . . ." EIS at III-77.

"Belugas generally are associated with ice and relatively deep water throughout the summer and autumn, which may reflect their preference for feeding on ice-associated arctic cod (Moore et al., 2000). Late-summer distribution and fall-migration patterns are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at III-77.

6. *Harbor Porpoise*

"The harbor porpoise inhabits shallow, coastal areas in temperate, subarctic, and arctic waters of the Northern Hemisphere (Read, 1999). In the North Pacific, harbor porpoises range from Point Barrow, Alaska to Point Conception, California (Gaskin, 1984). In Alaska, three separate stocks have been recommended, although there is insufficient biological data to support the designation at this time." EIS at III-78.

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d. *Bearded Seal*

"No reliable estimate for the size of the Alaska bearded seal stock currently is available (Angliss and Outlaw, 2005). Bengtson et al. (2005) conducted surveys in the eastern Chukchi Sea but could not estimate abundance from their data." EIS at III-74.

2. *Pacific Walrus*

"No reliable estimate is currently available for the size of the Alaskan stock of Pacific walrus (Angliss and Outlaw, 2005). However, available evidence indicates that the population is likely in decline (Kelly, Quakenbush, and Taras, 1999; Kochnev, 2004)." EIS at III-74. *See also id.* at EIS at III-76 (first sentence same).

"The population size has never been known with certainty; however, the most recent survey estimate was approximately 201,039 animals (Gilbert et al., 1992)." EIS at III-76.

3. *Polar Bear*

"A reliable estimate for the CBS stock of polar bears, which ranges into the southern Beaufort Sea, does not exist, and its current status is in question. In 2002, the IUCN/SSG Polar Bear Specialist Group estimated the size of the CBS population at 2000+ bears, though the certainty of this estimate was considered poor (Lunn, Schliebe, and Born, 2002)." EIS at III-84.

"Coastal areas provide important denning habitat for polar bears. Terrestrial denning areas for bears of the CBS polar bear stock are less well understood than those for the SBS polar bear stock." EIS at IV-166.

"The maximum reproductive age for polar bears is unknown, but is likely well into their 20's (Amstrup, 2003)." EIS at III-81.

"[W]ith the collapse of the Soviet empire in 1991, levels of illegal harvest dramatically increased in Chukotka in the Russian Far East (Amstrup, 2000; USDOl, FWS, 2003). While the magnitude of the Russian harvest from the CBS is not precisely known, some estimates place it as high as 400 bears per year, although the figure is more likely between 100 and 250 bears per year." EIS at III-84. *See also id.* at V-36 (same).

"[B]ecause of the unknown rate of illegal take currently taking place, in 2006 the IUCN/SSG Polar Bear Specialist Group designated the status of the CBS stock as "declining" from its previous estimate of 2000+ animals (IUCN/SSG Polar Bear Specialist Group, 2006)." EIS at III-84.

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III. MARINE AND COASTAL BIRDS

1. General

"Despite the importance [for marine and coastal birds] of [Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson], as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

2. Threatened Spectacled Eiders¹

"In general, population demography for this species and in particular breeding information (i.e., timing of pair formation and duration of pair bonds, timing of mating, male and female dispersal rates, sex-specific estimates for natal, breeding, and molt-site fidelity, breeding propensity, nonbreeding component, duckling/brood and first-year survival, etc.) is poorly understood due to a lack of long-term marking/monitoring programs and/or low resighting/recapture/recovery rates." BE at 23.

"Few data are available on the overall longevity of spectacled eiders, but if similar to other eiders, they would likely be long-lived." BE at 23.

"Recruitment rate of spectacled eiders is unknown (USFWS 1999)." BE at 25.

"Migration routes [of spectacled eiders] in the spring are not well known . . ." BE at 25.

"The summer range of non-breeding [spectacled] eiders is not known . . ." BE at 26.

"Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

"The world population of spectacled eiders has declined substantially during the past 30 years, and may be continuing to decline (USFWS 1999, 2002b). Long-lived species like spectacled eiders typically do not have highly variable populations and unknown mortality factors may be undermining their ability to maintain a stable population. The causes of decline could be varied and are largely unknown . . ." BE at 28.

¹ From Minerals Management Service, Biological Evaluation of Spectacled Eider (*Somateria fischeri*), Steller's Eider (*Polysticta stelleri*), and Kittlitz's Murrelet (*Brachyramphus brevirostris*) for Chukchi Sea Lease Sale 193 (September 2006), incorporated by reference into the Lease Sale 193 EIS at III-61, IV-125, V-30.

"Variability in the abundance of the Alaska breeding population of spectacled eiders is not well understood (USFWS 1999)." BE at 28.

"The Alaskan and Russian populations of spectacled eider were listed as a threatened species on 9 June 1993 (USFWS 1993). Although the factors that caused these declines are unknown, a number of potential contributory factors have been identified. These, or other still-undiscovered threats, have increased mortality above the rate of reproductive replacements. No data are available to show whether similar trends have affected the breeding population in Russia where as many as 40,000 pairs traditionally nested." BE at 29.

3. Threatened Steller's Eiders²

"[T]he length of time that Steller's eiders remain paired is unknown." BE at 13.

"Many life history aspects of Steller's eiders (e.g., timing of pair formation, duration of pair bonds, dispersal rates, sex-specific seasonal site fidelity, first-year survival, etc.) are poorly understood." BE at 13.

"The reason for relatively low nesting success or failure to nest by the Alaska nesting population is unknown, but may be related to predators switching to alternate prey when lemmings are in low abundance (Quakenbush and Suydam 1999)." BE at 15.

"Steller's eider recruitment rates are unknown (USFWS 2002b)." BE at 15.

"Departure from the [Arctic Coastal Plain] to molting areas is poorly documented, but males probably begin departing as early as late June, followed by non- and failed nesting females presumably from late July - late August, and finally successful females and fledged young." BE at 16.

"The population of Steller's eiders molting and wintering along the Alaska Peninsula appears to be declining (USFWS 1999, 2002a). . . . The causes of decline could be varied and are largely unknown, but if the cause of the decline is within the marine environment, it is reasonable to conclude that the Alaska and Russia nesting populations are being affected similarly because a large portion of the Russian population winters with the Alaskan population." BE at 18.

"Variability in the abundance of the Alaskan breeding population of Steller's eiders is not well understood." BE at 18.

"Williamson et al. (1966) listed Steller's eiders as occurring in the Cape Thompson area 25 miles southeast Point Hope during surveys for Project Chariot at Ogotoruk Creek. Steller's eiders were listed as occupying marine littoral, lacustrine, and beach environments in order of affinity. In this

² See note 1.

study, marine littoral waters extended seaward 2 miles from shore. Steller's eiders were listed as present from June 1 through October 4 and uncommon, but possibly breeding in the area. It is not known if Steller's eiders still nest in this area." BE at 20-21.

4. Kittlitz's Murrelets³

"The Kittlitz's murrelet (*Brachyramphus brevirostris*) is one of the rarest and least understood seabirds in North America. There is limited life history information on the Kittlitz's murrelet (i.e., age at first breeding, nest success, hatching success, fledging success, first-year survival, survival to breeding age, proportion of breeding females, proportion of non-breeders, periodic non-breeding, etc.) and mechanisms of population regulation. The limited information available for this species and research on the closely-related marbled murrelet suggests a *K*-selected life history strategy." BE at 33.

"The longevity of the Kittlitz's murrelet is unknown . . ." BE at 33.

"Age to maturity in Kittlitz's murrelets is unknown . . ." BE at 33.

"Little is known about the reproductive strategy of Kittlitz's murrelet because nesting sites are difficult to find (Day et al. 1999)." BE at 33.

"Annual breeding effort is poorly understood, but is considered highly variable." BE at 33.

"Spring migration for Kittlitz's murrelets in the Chukchi Sea is unknown . . ." BE at 34.

"Little is known about Kittlitz's murrelet recruitment . . ." BE at 34.

"Annual adult survival has not been estimated . . ." BE at 34.

"Though there is some evidence for long-term population declines for *Brachyramphus* murrelets (van Vliet and McAllister 1994, Ralph et al. 1995, Kuletz et al. 2003), Day et al. (1999) argued that evidence for major population declines for the Kittlitz's murrelet was equivocal. In large part, their conclusion stems from the fact that historical population estimates are lacking (but see Isleib and Kessel 1973, Agler et al. 1998, Kendall and Agler 1998)." BE at 34.

"Fall migration in the Chukchi Sea population [of Kittlitz's murrelet] is unknown . . ." BE at 35.

"Post-breeding distribution [of Kittlitz's murrelet] is poorly understood, but is likely farther offshore than pre-breeding season." BE at 35.

"Winter distribution [of Kittlitz's murrelet] is poorly understood, but is probably pelagic." BE at 35.

³ See note 1.

"The diet of the Chukchi Sea summer residents is unknown . . ." BE at 35.

"Winter foods are unknown, but may consist mostly of pelagic euphausiids or other macroinvertebrates." BE at 35.

"Information regarding fidelity to nesting sites is not available (Day et al. 1999)." BE at 35.

"[C]auses for the declines [in Kittlitz's murrelets] are not well known, but likely include: habitat loss or degradation, increased adult and juvenile mortality, and low recruitment, and we believe that glacial retreat and oceanic regime shifts are the factors that are most likely causing population-level declines in this species." BE at 36 (citing USFWS status review, 2004).

5. Cliff-Nesting Seabirds

a. Murres

Noting "limited data." EIS III-62.

b. Puffins

"The current status of horned puffins in the Chukchi Sea is unknown." EIS III-62.

"The current status of the tufted puffin in the Chukchi Sea is also unknown." EIS III-62.

c. Black-Legged Kittiwake

"The current status of the black-legged kittiwake (*Rissa tridactyla*) in the Chukchi Sea is unknown." EIS at III-63.

"The portion of [Chukchi] population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown." EIS at III-63. See also *id.* at IV-142 (similar).

"Current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown." EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

"The current status of the northern fulmar (*Fulmarus glacialis*) is unknown." EIS at III-63.

b. Short-Tailed Shearwater

“The current status of the short-tailed shearwater (*Puffinus tenuirostris*) in the Chukchi Sea is unknown.” EIS at III-63.

c. Auklets

“The current status of parakeet (*Cyclorhynchus psittacula*), least (*Aethia pusilla*) and crested (*A. cristatella*) auklets in the Chukchi Sea is unknown.” EIS at III-63.

7. High Arctic-Associated Seabirds

a. Black Guillemot

“The current status of the black guillemot (*Cephus grylle*) in the Chukchi Sea is unknown.” EIS at III-63.

b. Ivory Gull

“The current status of the ivory gull (*Pagophila eburnea*) in the Chukchi Sea is unknown. Divoky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea.” EIS at III-64.

c. Arctic Tern

“The current status of the Arctic tern (*Sterna paradisaea*) in the Chukchi Sea is unknown.” EIS at III-64.

8. Tundra-Breeding Migrants

a. Jaegers

“The current status of [all three species of] jaegers in the Chukchi Sea is unknown.” EIS at III-64.

b. Glaucous Gull

“The current status of the glaucous gull (*Larus hyperboreus*) in the Chukchi Sea is unknown.” EIS at III-64.

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“The North American population of bar-tailed godwits (*Limosa lapponica baueri*) breeds in western and northern Alaska. Postbreeding bar-tailed godwits move to staging grounds along the Bering Sea Coast and then apparently fly nonstop 11,000 km to New Zealand. Recent counts conducted at both breeding and nonbreeding sites provide evidence of a serious and rapid population decline (McCaffrey et al., 2006), but the cause of the decline is unknown.” EIS at III-69.

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9. Waterfowl

a. Yellow-Billed Loons

“Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is very little known about the coastal areas bordering the Chukchi Sea.” EIS at III-65.

“The [yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown.” EIS at IV-140.

b. Common Eider

“During spring migration, the common eider (*Somateria mollissima*) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore.” EIS at III-66.

c. Pacific Brant

“The current status of the Pacific brant along the Chukchi Sea is unknown.” EIS at III-68.

d. Greater White-Fronted Geese

“The current status of greater white-fronted geese along the Chukchi Sea coast is unknown.” EIS at III-68.

e. Lesser Snow Goose

“Ritchie et al. (2006) reported that the number of snow geese nesting on the Ikpiukuk River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kukpowruk River delta colony.” EIS at III-68.

10. Shorebirds

a. Buff-Breasted Sandpiper (species of concern)

Noting “limited data.” EIS III-70.

b. Bar-Tailed Godwit (species of concern)

“The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood.” EIS at III-69.

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LACK OF INFORMATION ABOUT EFFECTS ON SPECIES

I. FISH

A. General

1. General effects of seismic on fish

“A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur.” EIS at II-33. See also *id.* at IV-51—52 (similar) and IV-74 (similar).

2. General effects of oil spills on fish

“Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected.” EIS at II-34. See also EIS at IV-52 and IV-74 (similar).

“While small-spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill-response. Overall, it is unclear whether, over the long-term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected.” EIS at IV-72.

B. Effects on Marine Pelagic Species

“Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made.” EIS at IV-61.

C. Effects on Capelin

“Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAH's) retained in the substrate, as PAH's in weathered oil can be biologically available for long periods and very toxic to sensitive life stages, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of the capelin to detecting contaminated substrates and how long the oil persists in the localized habitat.” EIS at IV-60-61.

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“Also unknown are the distribution and abundance of spawning sites used by capelin in the Alaskan Arctic.” EIS at IV-63.

D. Effects on Arctic Cod

“Although arctic cod can be extremely abundant in nearshore lagoonal areas, the importance of nearshore versus offshore environments to the lifecycle is not known (Craig et al., 1982). Although it is known that juvenile arctic cod associate with floating ice, it is unknown to what degree this association contributes to the development and survival of young fishes later recruiting to the breeding population. If early lifehistory stages of arctic cod were concentrated in nearshore environments, in patches in the open ocean, or under floating ice, they certainly would be more vulnerable to effects from an oil spill impacting such habitats.” EIS at IV-62.

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adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area. Increasing vessel traffic in the Northwest Passage, defined as the marine route between the Pacific and Atlantic oceans through the Arctic Ocean across the top of North America, which includes the Proposed Action area, increases the risks of oil and fuel spills and vessel strikes of marine mammals.” EIS at IV-145—46.

“Because very little is known about the distributions, population sizes or habitat use of marine mammals in the Chukchi Sea, it is difficult to determine if significant impacts will or will not occur to marine mammals as a result of the proposed action.” EIS at V-32.

2. Effects of Seismic and Other Noise on Marine Mammals

“Because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area.” EIS at II-37. See also EIS IV-145—146 (similar).

“Despite the increasing concern and attention noted above, there still is uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially on the long-term, cumulative consequences of increasing noise in the world’s oceans from multiple sources (NRC, 2003, 2005). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral “take equivalents”. These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2005) are qualitatively incorporated in MMSS analysis.” EIS at IV-86.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown . . .” EIS IV-89.

“Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals.” EIS IV-147.

3. Effects of Oil Spills on Marine Mammals

“There are few post-spill studies with sufficient details to reach firm conclusions about the effects, especially the long-term effects, of an oil spill on free-ranging populations of marine mammals.” EIS at IV-115.

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II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

“Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur.” EIS at II-37.

“[B]ecause of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas [regarding Alt. III]. EIS at II-42. See also *id.* at IV-269 (same) and EIS at II-45 (same, re: Alt. IV).

“Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to predict with certainty what potential impacts from such development would have on threatened and endangered marine mammals.” EIS at IV-111.

“Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations.” EIS at IV-152.

“In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (IWC, 2006).” EIS at IV-162—63.

“[W]ithout historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals.” EIS at IV-156.

“Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammal populations in the project area as a result of the Proposed Action.” EIS at IV-145.

“Careful mitigation can help reduce the effects of future industrial developments and their accumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an

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B. Whales

1. General

“The need to rely on indirect methods of assessing the environmental impact of human activity on marine mammals is a recurring problem (Inglis and Gust, 2003). Impact assessments for cetaceans typically emphasize immediate behavioral responses to human activities (Samuels and Bejder, 2004), the biological relevance of which is rarely known (Corkeron, 2004).” EIS at IV-154.

“[M]onitoring plans typically emphasize readily obtainable, short-term behavioral measures that can be directly related to disturbance factors (Bejder et al., 2006). However, it is rarely known in what ways short-term responses translate to longer term changes in reproduction, survival, or population size (Gill, Norris, and Sutherland, 2001; Beale and Monaghan, 2004a), and it is seldom possible to infer biological significance based on short-term behavioral observations.” EIS at IV-154.

a. Effects from seismic/noise on whales in general

“[T]here is acknowledged . . . scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales.” EIS at IV-82.

“There are very few, if any, data available about potential effects of . . . noise . . . on cetacean calves.” EIS at IV-82.

“[T] here are few instances where data are sufficient to evaluate the total energy exposure of a marine mammal from a given source. At present, we do not have the data necessary to make such a determination or understand how it might change our analysis.” EIS at IV-86.

“While there is some general information available, evaluation of the impacts of noise on marine mammal species, particularly on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1998; NRC, 2003, 2005). This is particularly true for baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physiological effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; Ketten, 1998).” EIS IV-87.

“Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency.” EIS IV-87.

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“Repeated long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. Ketten (1998) stated that age-related hearing loss in humans is related to the accumulation of permanent-threshold shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown.” EIS at IV-88.

“There are no data on which to determine the kinds or intensities of sound that could cause a [temporary threshold shift, TTS] in a baleen whale.” EIS at IV-88.

“Little data are available about how, over the long term, most marine mammal species (especially large cetaceans) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source.” EIS at IV-88.

“Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to be used for intraspecific communication. However, because real knowledge of sound sensitivity is lacking, we believe it is prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in intraspecific communication.” EIS at IV-89.

“It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise.” EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

“There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . oil spills on cetacean calves.” EIS at IV-82.

“There are no data available to MMS that definitely link even a large oil spill [associated with seismic surveys] with a significant population-level effect on a species of large cetacean.” EIS at IV-103.

“Data are not available that would permit evaluation of the potential for long-term sublethal effects [from oil spills] on large cetaceans.” EIS at IV-115.

“[T]he potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects.” EIS at IV-115.

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repeated exposure to loud noise, on baleen whales. There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of either noise or oil spills on cetacean calves. Lastly, and importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales. Thus, it is difficult to predict exposure in some parts of the area where the action could occur and to understand fully the potential effects of any exposure.” EIS at IV-82.

a. Effects of seismic and other noise on bowhead whale

“Uncertainty exists about the potential effects of seismic surveys on bowhead whales (especially on calf survival and growth and female reproduction) in the Chukchi Sea due to a lack of current data about their use of the Proposed Action area during periods when seismic surveys could be occurring. What is known, however, is that the observed response of bowhead whales to seismic survey noise varies among studies. Some of the variability appears to be context specific (i.e. feeding versus migrating whales) and also may be related to the whales’ reproductive status and/or sex or age.” EIS at II-35.

“Bowheads respond to drilling noise at different distances depending on the types of platform from which the drilling is occurring. Data indicate that many whales can be expected to avoid an active drillship at 10- 20 km or possibly more.” EIS at II-36. *See also id.* at IV-194 (similar).

“The long-term response of bowheads to production facilities located at the southern end of the migration corridor is unknown.” EIS at II-36.

“The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown.” EIS at IV-194 (internal references omitted).

“There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur. . . .” EIS at IV-82.

“More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales.” EIS at IV-82.

“Data are not sufficient to determine sex, age, or reproductive factors that may be involved in [bowhead] response to vessels. We are not aware of data that would allow us to determine whether females with calves tend to show avoidance and scattering at a greater, lesser, or at the same distances as other segments of the population.” EIS at IV-109.

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“With whales, even when unusual changes in abundance occur following an event such as the EVOS (as with the disappearance of relatively large numbers of killer whales from the AB pod in Prince William Sound) (Dahlheim and Matkin, 1994), interpretation of the data is uncertain or is often controversial due to the lack of supporting data, such as oiled bodies or observations of individuals in distress (and, in that case, the existence of a viable alternate explanation of the probable mortality). Thus, the potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-115. *See also id.* at IV-117 (latter two sentences similar).

“It is not clear how long crude oil would remain on a free-ranging cetacean’s skin once it was oiled.” EIS at IV-117.

“The potential effect of crude oil on the function of the cetacean blowhole is unknown.” EIS at IV-118. *See also id.* at IV-159.

“The effects of an oil spill on cetacean newborns or other calves and the potential effects of contact or detection of spilled oil by near-term, or post-partum females are not known.” EIS at IV-121.

“[T]he potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. However, observations of cetaceans behaving in a lethargic fashion or having labored breathing has been documented in more than one species, including in gray whales after the EVOS, in which large numbers of individuals were subsequently found dead.” EIS at IV-158.

“The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, reduced immune function, reduced reproduction or longer dependency periods) effects on large cetaceans from a large oil spill essentially is unknown. There are no data on large cetaceans adequate to evaluate the probability of sublethal effects. EIS at IV-160.

“The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial.” EIS at IV-161.

2. Bowhead Whale

“There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur; where leases will be let; where a spill could occur; where production platforms and pipelines may be based; etc. More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially

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“The encounter rate of bowhead whales with vessels associated with exploration would be determined by what areas were being explored. Data are insufficient for us to accurately predict the average geographic zone of activity by the support vessels and thus, to predict the additional area that could be affected by the vessels.” EIS at IV-100.

“Data on reactions of bowheads to helicopters are limited.” EIS IV-100.

“While it is clear that seismic activity may overlap with bowhead use of the Chukchi Sea during fall migration, it is highly uncertain about the likely extent of overlap between seismic activity and bowhead whales in the summer.” EIS at IV-101.

“During fall migration, available, but dated, data indicate that overlap is likely to be greatest in the main migratory pathways, one heading nearly directly to the Bering Strait, and the other heading west from Barrow towards Wrangell Island.” EIS at IV-101—102.

“It is clear that if 2D/3D seismic surveys impacted areas of the spring lead and polynya system during the spring migration, impacts could potentially be biologically significant. We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined.” EIS at IV-102.

“The second situation for possibly larger than typical impacts exists in the Chukchi Sea in the autumn (e.g., late September on) as whales migrate both towards the Asian coast and toward the Bering Strait. Insufficient data exist to determine the current migration paths or the numbers of whales that might be deflected from those paths. Data are also not available to determine how intensively bowheads feed during the autumn migration in the Chukchi Sea or whether large aggregations exist in certain places due to prey resources.” EIS at IV-103.

“The factors associated with the variability [of bowhead responses to drillships and other noise] are not fully identified or understood.” EIS IV-105.

“There are few data on the noise [imposed on, e.g., bowheads] from conventional drilling platforms.” EIS at IV-105.

“Most observations of bowheads tolerating noise from stationary operations are based on opportunistic sightings of whales near ongoing oil industry operations, and it is not known whether more whales would have been present in the absence of those operations. Because other cetaceans seem to habituate somewhat to continuous or repeated noise exposure when the noise is not associated with a harmful event, this suggests that bowheads will habituate to certain noises that they learn are nonthreatening. Additionally, it is not known what components of the population were observed around the drillship (adult or juvenile males, adult females, etc.)” EIS IV-105.

“The response of bowhead whales to construction in high use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown.” EIS at IV-123.

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"The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed." EIS at IV-194.

"Noise associated with ships or other boats potentially could cause bowheads to alter their movement patterns or make other changes in habitat use. Clapham and Brownell (1999) summarized that "...effects of ship noise on whale behavior and ultimately on reproductive success are largely unknown." EIS at V-23.

"[R]ecent monitoring studies indicated that most fall migrating whales avoid an area with a radius about 20-30 km around a seismic vessel operating in nearshore waters; however, there are no data that indicate that such avoidance is long-lasting after cessation of the activity." EIS at V-25.

b. Effects of oil spill on bowhead whale

"There is uncertainty about the effects on bowheads (or any large cetacean) from the event of a large oil spill." EIS at II-36.

"The potential effects to bowheads of exposure to [polyaromatic compounds, PACs] through their food are unknown. Because of their extreme longevity, bowheads are vulnerable to incremental long-term accumulation of pollutants." EIS at IV-103. *See also id.* at IV-119 (same).

"In the Biological Opinion for Federal oil and gas leasing and exploration by the MMS within the Alaskan Beaufort Sea and its effects on the endangered bowhead whale, the NMFS (2001:51) stated that: 'It is difficult to accurately predict the effects of oil on bowhead whales (or any cetacean) because of a lack of data on the metabolism of this species and because of inconclusive results of examinations of baleen whales found dead after major oil releases.'" EIS at IV-103.

"There is great uncertainty about the potential effects of ingestion of spilled oil on bowheads, especially on bowhead calves. Decreased food assimilation could be particularly important in very young animals, those that seasonally feed, and those that need to put on high levels of fat to survive their environment." EIS at IV-118.

"It is not known if bowheads would leave a feeding area where prey was abundant following a spill." EIS at IV-118.

"The factors associated with the presence of [large aggregations of bowhead whales] are not yet clear. It is not known if they would leave the area heavily contaminated with crude oil." EIS at IV-121.

"Primarily because of the uniqueness of the bowhead and its apparently obligate use of spring lead and polynyas as its migratory path between wintering and summering grounds, MMS is uncertain of the potential severity of impact should a large oil spill occur within such a system, especially if spring migration were underway and hundreds of females were calving in or near those leads." EIS at IV-121.

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"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"In conclusion, there is uncertainty about effects on bowheads (or any large cetacean) in the event of a large oil spill. There are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area. If a large amount of fresh oil contacted a significant portion of such an aggregation, effects potentially could be greater than typically would be assumed and we cannot rule out population-level effects if a large number of females and newborn or very young calves [so this would be in spring] were contacted by a very large amount of fresh crude oil." EIS at IV-125.

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"It is unknown what effects an oil spill would have on bowhead whales, but it is likely that some whales would experience temporary, nonlethal effects from the oiling of skin, inhaling hydrocarbon vapors, ingesting oil contaminated prey, fouling of their baleen, losing their food source, and temporary displacement from some feeding areas." EIS at IV-216-217.

"Limited monitoring data prevent effective assessment of cumulative subsistence-resource damage; resource displacement; changes in hunter access to resources; increased competition; contamination levels in subsistence resources; harvest reductions; or increased effort, risk, and cost to hunters. Limited data also limit our assessment of the effectiveness of mitigation measures." EIS at V-46.

c. Effects of past activity on bowhead whale

"Available data . . . are inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior." EIS at V-25.

Also, "we cannot adequately assess potential effects on patterns or durations of bowhead habitat use. Because of the inadequacy of the data on activities, and because of the limitations inherent in studying large baleen whales, MMS was not able to assess whether there were any adverse health effects to individuals during the period of relatively intensive seismic survey activity in the 1980's." EIS at V-25.

"However, data are inadequate to fully evaluate potential impacts on whales during this period, including the duration of habitat use effects or numbers and types of individuals that did not use high-use areas because of the activities." EIS at V-27.

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d. Cumulative effects on bowhead whale

"[D]ata on other potential perturbations (e.g., past seismic surveys and oil spills) are not sufficient to clearly know the level of effects [on bowheads]." EIS at V-20.

"Whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected." EIS at V-20.

"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation area." EIS at V-20.

"There are insufficient data to make reliable predictions of the effects of Arctic climate change on bowhead whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and or injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, vessel traffic, construction, geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

3. Beluga Whale

"A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV.C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown." EIS at IV-161.

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

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4. Humpback, Fin, and Other Baleen Whales

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"No studies are available specific to the effects of seismic-survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on gray and minke whale behavior as a result of seismic activity." EIS at IV-151.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking." EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

"[I]t is difficult to predict the impact of a large spill on either humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would be not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-122.

"There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age." EIS at IV-161.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

"There are no records of humpbacks killed or injured in the fisheries in which fishers self report (Angliss and Lodge, 2002), but the reliability of such data is unknown." EIS at V-29.

"The impacts of pollution and habitat degradation [on humpback whales] due to coastal development are not known." EIS at V-30.

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C. Other Marine Mammals

1. Seals

"It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey." EIS at IV-147.

In the context of seals: "Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS at IV-147.

"Little information is known about oil-spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest." EIS at IV-217 (internal references omitted).

2. Walrus

a. Effects of seismic

There is "no data available to evaluate the potential response of walruses to seismic operations." EIS at IV-148.

"Quantitative research on the sensitivity of walruses to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walruses." EIS IV-148.

"Although the hearing sensitivity of walruses is poorly known, source levels are thought to be high enough to cause temporary hearing loss in other species of pinnipeds." EIS at IV-148.

"Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walruses to seismic operations." EIS IV-148.

3. Polar Bears

a. Effects from oil spills

"With the limited background information available regarding large oil spills in the offshore arctic environment, the outcome of a large oil spill is uncertain." EIS at IV-165.

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b. Cumulative effects

"Quantitative data are lacking that specifically addresses the potential cumulative impacts of development on polar bears and the effects of disturbance related to human activities on polar bear habitat use, as well as recruitment and survival (Perham, 2005). There also is a high degree of uncertainty regarding the spatial scope of potential Industry activities on the Alaskan OCS." EIS at V-36. *See also id.* at V-52 (same).

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III. MARINE AND COASTAL BIRDS

A. Impacts Generally

"Several areas historically documented to be important to marine and coastal birds in Sale 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species-groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high." EIS at II-37.

"The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown." EIS at IV-132.

"Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas are Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

1. Noise impacts on marine and coastal birds

"Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown." EIS at IV-127.

"Few studies have assessed the effects of seismic surveys on marine birds and waterfowl." EIS at IV-127.

2. Oil impacts on marine and coastal birds

"There are several areas historically documented to be important to marine and coastal birds in the proposed lease sale area. These areas, as well as the entire proposed lease sale area, lack site-specific data on habitat use patterns, routes and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult." EIS IV-126.

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"It is unknown if exposed adult[birds] could become permanently sterilized [due to exposure to oil]." EIS at IV-133.

B. Impacts to Threatened Spectacled and Steller's Eiders⁴

"The behavioral response of eiders to aircraft overflights is unknown; some spectacled eiders nest and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences." BE at 38 (emphases added).

"Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate ..." BE at 44.

Ledyard Bay Critical Habitat Areas: "The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but could be in important staging or molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in those areas during the prolonged migration period ultimately may influence the survival of the spectacled eiders (Petersen et al. 1999)." BE at 47.

"The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for eiders within the Critical Habitat Area are also largely unknown." BE Addendum at 1.

C. Impacts to Kittlitz's Murrelets⁵

"Clearly, there is cause for concern regarding the long-term survival of the [Kittlitz's Murrelet] and the potential negative impacts of offshore oil and gas development; however, management decisions are difficult given the lack of available information." BE at 36-37.

"Though impacts of oil spills [on Kittlitz's murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999)." BE at 37.

⁴ See note 1.

⁵ See note 1.

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“Additional information on the response of diving birds to approaching seismic survey vessels is essential to verify assumptions that there is a low potential for seabirds, including Kittlitz’s murrelets, to be harmed by airgun noises.” BE at 41.

D. Impacts on Waterfowl

1. Impacts on Yellow-Billed Loons

“Yellow-billed loons in the Chukchi Sea are at particular risk [from environmental perturbations such as disturbance, habitat alterations, and oil spills] due to their low numbers and low reproductive rate. The species is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown. Additional research could improve our understanding of the vulnerabilities of the yellow-billed and other loons using nearshore areas of the Chukchi Sea and western Beaufort Sea.” EIS at IV-140-41.

2. Impacts on Common Eiders

“The number of [common eiders] that could be affected [by oil spill] at sea during spring or fall migration is unknown.” EIS at IV-142.

E. Impacts on Shorebirds

“Dunlins are another prominent species in Kasegaluk Lagoon and Peard Bay in late summer and fall. As with other species of shorebirds and waterfowl, a spill during periods of peak abundance could impact large numbers of dunlins. Less is known about the numbers, timing, and patterns of habitat use of Kasegaluk Lagoon and Peard Bay by bar-tailed godwits but, given their recent population declines, effects of an oil spill could be particularly important.” EIS at IV-144.

The Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impacts statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Because the environmental assessments for the exploration drilling proposed for the Beaufort and Chukchi Seas in 2010 assume that no large spill will occur, they do not contain any additional modeling of, or evaluation of potential effects from, a spill. The model used in the environmental impact statements suffers from substantial deficiencies:

- The model assumes that spilled oil is a point—it does not account for spreading of spilled oil, for the possibility that different parcels of a spreading oil slick may travel along different trajectories, or that these parcels may re-converge at locations distant from the spill origin, all of which are important aspects of the behavior of actual oil spills.
- Much of the environmental data input to the model is old—particularly current and wind information, which is from 1979-1996. Much has changed in the Arctic since then, and better information should be available.
- The model cannot account for the presence of sea ice. It assumes that shorefast ice exists for part of the year and that the ice “masks” the shore, which means that no oil could reach the shore.
- The model divides the leased area into a series of quadrants. Within each quadrant, it predicts that a spill could occur from a number of locations. It treats a spill from each location as equally likely and then provides an estimate of likelihood that a spill from each quadrant would reach land. This method biases the calculation in two ways. Some of the locations are further from land than others, so the model understates the likelihood of spilled oil from one of the closer locations reaching shore. Also, a spill is not equally likely from each location—Shell only wants to drill at some of them.
- The SINTEF model used to evaluate weathering effects on spilled oil is independent of the model used to estimate trajectories, making it impossible to evaluate effects related to, for example, the increasing propensity of oil to sink as it weathers.
- The model does not consider interactions with suspended particulate matter, which is crucial for determining the propensity of spilled oil to sink, thereby affecting the benthic community which is especially important in Arctic coastal marine ecosystems.
- More sophisticated and appropriate models that address the defects listed above have been available for over a decade.

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November 29, 2010

VIA EMAIL

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Re: Chukchi Sea Lease Sale 193 Draft Supplemental Environmental Impact Statement

Dear Director Goll:

The Pew Environment Group appreciates the opportunity to comment on the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193 (draft SEIS). Unfortunately, the draft SEIS does not provide the “hard look” at the environmental impacts of Lease Sale 193 required by the National Environmental Policy Act (NEPA) because it fails to include necessary information regarding environmental consequences of oil and gas activities within the lease sale area. Thus, we request that BOEMRE prepare a revised draft SEIS that fully addresses the issues presented below.

The draft SEIS was prepared in response to a July 21, 2010 order of the Alaska federal district in *Native Village of Point Hope v. Salazar*. In that case, plaintiffs challenged the adequacy of the Final Environmental Impact Statement (FEIS) prepared by BOEMRE for the nearly 30 million acre Chukchi Sea Lease Sale 193. The court concluded that the FEIS analysis of environmental impacts of oil and gas activities in the Chukchi Sea lease sale area was deficient, and required the agency to rectify those flaws in a supplemental EIS. Specifically, the court ordered BOEMRE to (1) analyze the environmental impact of natural gas development; and (2) determine whether missing information identified by BOEMRE in the FEIS was essential or relevant to the agency’s decision making as required under NEPA regulation 40 CFR 1502.22; then (3) determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown. Our comments focus on the draft SEIS’ assessment of the relevance and need for information that was identified in the FEIS as missing or incomplete.

As an initial matter, we note that the analysis in the draft SEIS is not consistent with the Department of Interior’s offshore oil and gas program reforms that have been adopted in response to the *Deepwater Horizon* oil spill in the Gulf of Mexico. The Secretary of Interior has announced several changes to improve its analyses and decisions, most notably with respect to

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NEPA compliance¹ and with respect to ensuring that decisions are based on sound science as detailed in the September 29, 2010, Secretarial Order No. 3305. In addition, the Department’s September 1, 2010 Outer Continental Shelf (OCS) Safety Oversight Board report provided recommendations to strengthen permitting and environmental stewardship. The report highlighted concerns with BOEMRE’s failure to fulfill its dual mandate to lease offshore lands, yet also to protect the environment and cultural resources. The Alaska Region must ensure these recommendations and reforms are implemented in all new decisions, including its draft SEIS for the Chukchi Sea. To date, the Alaska Regional office of BOEMRE has failed to do so.

NEPA and OCSLA Require Missing or Incomplete Information be Included in the SEIS

BOEMRE was ordered to supplement the FEIS it prepared for Lease Sale 193 by reassessing the extent and relevance to decision making of missing information about the environmental impacts of offshore oil and gas activities in the Chukchi Sea. In preparing the draft SEIS, BOEMRE must comply with NEPA’s obligation to take a “hard look” at environmental impacts, just as it must in preparing an initial FEIS. The draft SEIS fails to do so.

The draft SEIS purports to respond to the court’s order to meet the requirements of NEPA regulation 40 CFR 1502.22² by determining whether missing information in the FEIS is relevant to assessing potentially significant effects of oil and gas development in the Chukchi Sea, and whether the missing information is essential to a reasoned choice among the FEIS’ alternatives. The purpose of that regulation is to require agencies to gather all information necessary to make a decision, but to allow it to move forward in cases where information might not be relevant to the decision to be made or if the cost of obtaining the information is exorbitant. BOEMRE has not taken seriously its obligation to make a decision informed by science, and to gather whatever missing scientific information is needed, but has instead undertaken a paper exercise, simply cataloging the hundreds of statements in the FEIS regarding missing information and then concluding that the addition of any of this information is not necessary in the decision-making process.

BOEMRE’s primary rationale for its assertion that the information is not essential at the lease sale stage is that the decision is not a consequential commitment of the area to oil and gas activities and information can be obtained at later stages of the Outer Continental Shelf Lands Act (OCSLA) process, when the agency is evaluating exploration or production plans. This

¹ CEQ NEPA Guidance available at http://ceq.hss.doe.gov/current_developments/docs/CEQ_Report_Reviewing_MMS_OCS_NEPAImplementation.pdf

² Once incomplete or unavailable information regarding a foreseeable significant adverse effect is disclosed in an EIS, NEPA regulation 40 C.F.R. 1502.22 requires that: “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.” Thus, the focus of the regulation is on obtaining that information and including it in the EIS.

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reasoning misconstrues OCSLA, and also overlooks longstanding BOEMRE practice to conduct only abbreviated environmental assessments at the exploration plan stage and instead to rely heavily on the lease sale EIS analysis. This practice is necessitated by OCSLA, which requires the Secretary of the Interior to approve exploration plans within 30 days, constraining BOEMRE's ability to undertake an environmental review at that stage beyond the brief environmental assessment (EA) that, as a matter of practice, it prepares at the exploration stage.

More significantly, BOEMRE's reasoning ignores the nature of the decision to be made at each stage of oil and gas development under OCSLA. It is at the lease sale stage that the agency makes the decision about whether, where and how oil and gas activities will occur within a particular portion of the outer continental shelf. Once the leases are issued, the agency's ability to alter course is constrained. OCSLA authorizes the Secretary to suspend or cancel a lease or permit only if oil and gas activities threaten to cause serious harm or damage to life, property, the environment, or national security or defense. At the exploration plan stage, the decision is whether to approve a plan that outlines the exact location, timing and equipment to be used to explore for productive deposits of oil and gas. The decision at the development and production stage is similar. In other words, while OCSLA establishes stages for development of oil and gas resources in the outer continental shelf, the decision about whether to allow that activity to go forward occurs at the lease sale stage; the decisions at later stages are simply refinements of the lease decision and BOEMRE cannot change the decision about whether to authorize oil and gas activity absent unusual circumstances. Thus, BOEMRE must have complete information about the environmental effects at the lease sale stage *before* it decides whether to authorize oil and gas activities. This thorough understanding of the existing environment and the environmental consequences of development within that environment is essential not only to determining whether to authorize oil and gas activities but also to identify any mitigation measures to minimize potential environmental impacts.

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across the Chukchi Sea, and this lack of information has been widely acknowledged (e.g., CRRC 2010, MBC 2007). Table 1 depicts by category the types of essential missing basic data about the Chukchi Sea ecosystem.

Type of Essential Need (or gap in knowledge)	Explanation	Example of Essential Need or gap in knowledge
Topic	Some resources have not been studied in the Arctic or have very little information.	Zooplankton, benthic organisms, fish
Abundance	For many species or species groups, there is little or no information on population size and/or relative abundance.	Zooplankton, Opilio crab, fish, ice seals, Chukchi polar bear population, Kittlitz's Murrelet
Spatial coverage	Many resources studied in depth still lack complete coverage over the Beaufort and Chukchi seas within the U.S. EEZ.	Benthic biomass, fish, Steller's Eider, Arctic fox
Type of Essential Need (or gap in knowledge)	Explanation	Example of Essential Need or gap in knowledge
Temporal coverage	Outside of remotely sensed satellite information (temperature, chlorophyll-a, etc.), no resource in the Arctic has adequate data to detect temporal change over annual or decadal time periods for the Beaufort and Chukchi seas.	Invertebrates, fish, birds (surveyed in nearshore areas only), and marine mammals (surveyed in Beaufort only)
Seasonal coverage	Most surveys occur in July and August when weather, sea ice, and snow are in optimal condition; direct observation is difficult to impossible at other times of the year. Most species are lacking adequate seasonal distribution data.	Invertebrates, benthic organisms, fish, polar bear, ribbon seal
Spatial scale	Very broad-scale information covering the Beaufort and Chukchi seas is available for many species. Similarly, fine scale survey data in disjunct development areas also exist. Mid-scale data with full spatial coverage are needed to make reasoned landscape-scale management decisions.	The Outer Continental Shelf Environmental Assessment Program (OCSEAP) which occurred in the 1970-1980s is a good mid-scale survey that has not occurred in recent years.

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BOEMRE also asserts that it can defer gathering missing information at the lease sale stage because tiering of NEPA analyses is allowed within OCSLA. However, BOEMRE's approach is a misapplication of "tiering" within NEPA. Tiering is a means to allow an agency to avoid repetitive analysis in subsequent, more site-specific phases of a project. Thus, if a complete EIS is prepared at the first stage in which potential significant effects are identified, subsequent decisions can often be accompanied by a shorter EA/FONSI or an EIS that incorporates and follows from the analysis in the prior EIS. The key is that tiering allows for *subsequent* NEPA analysis to build on a thorough EIS prepared at an earlier stage. By assuming that it can defer gathering information until a later stage, BOEMRE is in essence committing itself to undertaking an EIS later, turning tiering on its head. In light of the fact that BOEMRE's decisions regarding approvals for oil and gas activity continue to be challenged, it makes no sense to pursue a status quo approach that satisfies no one. In its August 16, 2010 report and recommendations to BOEMRE regarding NEPA implementation, the Council on Environmental Quality (CEQ) clarified the purpose and implementation of tiering.³ The practical reality is that in order to fully comply with NEPA within the structure of OCSLA, the agency must prepare a full assessment of potential impacts and the site-specific details and impacts can then easily be addressed within the compressed approval time period for an exploration plan.

It bears mentioning that the task of gathering the vast amount of incomplete and missing information necessary to conduct a thorough analysis of the environmental impacts of oil and gas activity within Lease Sale 193 is a consequence of BOEMRE's decision to offer for lease an area approximately the size of Colorado.⁴ It would be daunting in the best of circumstances to gather and analyze the necessary information for an area of this huge scope. Nonetheless, BOEMRE cannot use its decision to offer for lease such a huge area to then treat the lease sale decision as a programmatic rather than site specific decision or as an excuse to not fully analyze the environmental impacts of oil and gas activity within that area on the grounds that it is too big with too many unknowns.

Information Identified as Missing or Incomplete in the FEIS and draft SEIS is Essential to Making Decisions Regarding the Lease Sale

BOEMRE also concludes that missing information is not relevant or essential to a choice among alternatives because the impacts under all of its alternatives are essentially the same. This rationale does nothing to support its position but instead suggests that its range of alternatives is inadequate, further compounding the flaws in the FEIS. Much of the missing information identified by BOEMRE in the original Lease Sale 193 EIS is essential to a reasoned choice about whether, where, and under what conditions to offer oil and gas leases in the Chukchi Sea. Gaps in data about the Chukchi Sea include missing basic information about species that inhabit the region and their habitat needs over both time and space. These types of gaps are widespread

³ CEQ NEPA Guidance at 22-24, available at http://ceq.hqs.gov/current_developments/docs/CEQ_Report_Reviewing_MMS_OCS_NEPAImplementation.pdf
⁴ Under OCSLA, leases are to be for tracts "consisting of a compact area not exceeding five thousand seven hundred and sixty acres, as the Secretary may determine, unless the Secretary finds that a larger area is necessary to comprise a reasonable economic production unit." 43 U.S.C. Sec. 1337(6)(b).

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Another type of missing information is data about the effects of oil and gas exploration and development on species and habitats in the Chukchi Sea. One of the lessons we have learned from the *Deepwater Horizon* Gulf of Mexico oil spill is that BOEMRE must conduct meaningful environmental review, including a full analysis of impacts, before offshore oil and gas activities occur (Nuka 2010). For example, to prevent and prepare for oil spills in the Arctic Ocean, BOEMRE needs information on the physical environment and the unique challenges it poses to offshore oil and gas drilling. It also needs to understand the effect of drilling and oil spills on marine ecosystems. A prediction of the impacts of spilled oil in Arctic waters must take into account the behavior of oil in an environment with sea ice, the varying characteristics of sea ice throughout the year, Arctic weather conditions, the long-term fate of oil in cold water and the specific vulnerabilities of Arctic marine species and ecosystems. BOEMRE has not endeavored to obtain this information for the draft SEIS.

BOEMRE Failed to Include in the FEIS and draft SEIS Available Analyses and Studies

BOEMRE completed this draft SEIS without obtaining and incorporating information from relevant Department of Interior Arctic Ocean science initiatives. Those efforts, though not currently complete, would contribute to a more thorough analysis of environmental impacts in the draft SEIS. Specifically, BOEMRE failed to take advantage of - or even acknowledge - the ongoing analysis by the U.S. Geological Survey (USGS) to identify information gaps in the Arctic Ocean as related to decisions about OCS activity that was ordered by the Secretary of Interior on March 31, 2010. That analysis will be completed in April 2011. The draft SEIS also appears to have been developed in isolation from an assessment BOEMRE is undertaking specifically to address missing information about the Chukchi Sea (MBC 2007). This Chukchi Offshore Monitoring in Drilling Area (COMIDA) effort by BOEMRE is intended to "characterize the Chukchi Sea ecosystem in order to detect and distinguish future changes resulting from oil industry activities, natural variability, and other anthropogenic effects...prior to oil and gas exploration activities" (MBC 2007). The COMIDA effort is supposed to look at data needs and provide monitoring recommendations from an ecosystem perspective, and to obtain baseline data before oil and gas activity, including exploration begins in the Chukchi Sea. While COMIDA has a promise of providing sufficient information to assist the agency in making informed decisions, the agency is not using the information gained from this research effort to inform its decisions regarding if, when, where and how oil and gas activities might occur in the Chukchi Sea.

Moreover, BOEMRE could have - and should have - included additional information in the draft SEIS that has become available in the two years since the FEIS was completed. Attachment 1 is a list of references that include relevant and essential information that should be incorporated into a revised draft SEIS.

One example pertains to the bowhead whale - an important marine mammal for the Inupiat along the Arctic slope, and a species afforded protection under the Marine Mammal Protection Act and the Endangered Species Act. The FEIS acknowledges "data are limited on the bowhead whale fall migration through the Chukchi Sea before the whales move south into the Bering Sea." And that "recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available." In the draft SEIS (Appendix A) BOEMRE

responded that: “While there will always be some lag between environmental change and available data that reflects that change, BOEM (formerly MMS) has conducted or commissioned extensive study bowhead use of the Chukchi Sea, and a general understanding of the bowhead distribution, abundance, and habitat use is known.” The important and very pertinent research to which the agency refers was finalized in July of this year, and made publicly available on their website during the fall of 2010 (Quakenbush et al. 2010). The draft SEIS goes on to say “Existing information is sufficient to support sound scientific judgments and reasoned managerial decisions, especially during the earlier stages of OCSLA review, which are necessarily more programmatic in nature. Furthermore, the missing information pertains to potential impacts equally applicable to each action alternatives, meaning that additional information on this subject is not likely to be useful to decision making at this stage. Overall, this incomplete information is not essential to a reasoned choice among alternatives.” However, this is not necessarily the case, as Quakenbush et al. (2010) identified important corridors for migration and important feeding areas that should be excluded from the lease sale or at least considered essential information.

The alternatives considered by BOEMRE in the draft SEIS all have the same impacts, with the exception of no action – indicating that the range of alternatives is too narrow. Ecologically sensitive areas must be identified and protected. Areas within an ecosystem are not equal in biological and ecological terms; some areas are more important than others to the ecosystem or human populations. Identification of important ecological areas based on essential habitats and functions in the Arctic ecosystem along with traditional cultural activities, can be an important step toward ensuring ecosystem functionality. The ecologically and culturally sensitive areas in the Arctic Ocean should be removed from the leasing process.

The draft SEIS also fails to include all of the relevant and related information collected from the BOEMRE Environmental Studies Program in Alaska. For example, Attachment 2 documents peer reviewed literature produced by the Environmental Studies Program since 1990⁵ that was not considered, but relevant to the FEIS and subsequent draft SEIS. The Alaska Annual Studies Plan Final FY 2011 notes that since the conception of the Environmental Studies Program in 1973 more than \$350 million has funded studies in Alaska across 15 planning areas (BOEMRE 2010). Since much time and effort was put into these studies, it is for BOEMRE’ responsibility to consider the results and implications of these study results, particularly as they may contribute to some of the essential unknown information about species and habitats as well as the effects of oil and gas exploration and development on these species and habitats.

Traditional Knowledge Can Be Used to Fill Gaps in Information

Some of the information that was identified in the FEIS and draft SEIS as missing or incomplete could be satisfied in part by incorporating local and traditional knowledge. Local and traditional knowledge, a different but equally valid knowledge system will help expand our understanding of the Arctic and can supplement and enhance existing knowledge. Indigenous peoples who have lived in the Arctic Ocean region for millennia have developed a wealth of knowledge about

⁵ BOEMRE provides a listing of all peer-reviewed ESP studies at: http://alaska.boemre.gov/ess/2010_0604_AKPeerReview.pdf (last accessed 21 November 2010)

BOEMRE has used the same flawed segregated approach that it uses in its research to its assessment of missing information in the draft SEIS. The agency has reached the conclusion that none of the missing information is essential to decision making by addressing each statement regarding missing information in isolation without looking at the entire set of research needs for particular species or other environmental parameters. However, a more holistic approach, would likely lead to a different conclusion. It is possible to conclude that each piece of missing information might not be relevant to the decision to be made, but taken together, all of the missing information for a particular species certainly is important. This type of piecemeal approach to scientific research is pervasive in all of BOEMRE research study programs and ensures that scientific research produces little useable information to advance knowledge about the Arctic Ocean.

What is needed instead is a comprehensive, integrated research and monitoring plan for the U.S. Arctic to improve our understanding of Arctic marine ecosystem structure and functioning and to avoid adverse impacts on the Arctic environment and subsistence way of life. Such a plan should (1) define existing information and research needs such as in a gap analysis (this is currently undertaken by the USGS) (2) gain a more comprehensive catalog of species, populations and habitats (including seasonal migrations) in a marine life assessment (3) track the physical factors that influence and determine biological productivity, habitat preference and migration pathways in an integrated, comprehensive environmental monitoring program (4) secure a better understanding of ecosystem interactions and trophic linkages and the effects of human activity and (5) integrate scientific data to identify processes and habitats that are sensitive and vulnerable to disruption. Such work is critical to the development of a comprehensive, collaborative program of research, monitoring, data collection, mapping, and documentation of local and traditional knowledge in the Arctic Ocean. This science plan would provide the framework for all development activity in the Arctic, and approval of oil and gas development activity would have to be consistent with the plan’s ecological science, monitoring, and assessments.

BOEMRE Must Prepare a Revised SEIS

BOEMRE’s draft SEIS fails to adequately address the district court’s order and fails to satisfy NEPA’s requirements. The draft SEIS also fails to incorporate the offshore oil and gas program reforms initiated by Department of Interior in the face of the worst environmental disaster in our nation’s history. BOEMRE should prepare a revised draft SEIS only after it has gathered missing information and drawn on the work of other agencies.

Sincerely,

Marilyn Heiman
Director, U.S. Arctic Program
PEW Environment Group

Eleanor Huffines
Manager, U.S. Arctic Program
PEW Environment Group

the region. They depend on local plants and animals for food, clothing and shelter, and have learned a great deal about the species they use and see. In recent years, a substantial amount of research has focused on traditional knowledge in the Arctic. Major projects such as the Arctic Council’s Arctic Climate Impact Assessment (ACIA 2004) have incorporated traditional knowledge in efforts to understand what is taking place in the region. Nonetheless, there is much more to be done to make the knowledge of Arctic peoples more widely available, such as incorporating traditional knowledge in management processes that directly impact people, including in this EIS process. Co-management organizations and institutes of public governance are one means of incorporating not just knowledge but the holders of that knowledge in the decision-making process. Greater involvement by Arctic peoples in the governance of their regions and communities allows their knowledge to benefit modern institutions. These approaches can help in the development of long-term solutions to economic and environmental challenges in the Arctic.

Documenting knowledge in a report, however, is just one step towards fully incorporating what Arctic peoples have learned over generations. A report about traditional knowledge may put certain facts and observations before a larger audience but using that knowledge appropriately entails the wisdom than many people associate with traditional perspectives. We have attached a bibliography with selected references that should help provide guidance and provide examples of situations where traditional knowledge has been effectively utilized (Attachment 3). Traditional knowledge can help fill some of the gaps in the draft SEIS as well as guide future efforts to collect necessary information.

BOEMRE Must Employ a Holistic Ecosystem-Based Approach to Research

We recognize and acknowledge that research has been and is currently being conducted in the Chukchi Sea by various U.S. government agencies, and by industry (e.g., BOEMRE 2010, Funk et al. 2007). These studies are important and contribute to our baseline knowledge and understanding of the Chukchi Sea ecosystem. However, the existence of such research does not necessarily mean that it is relevant or complete to sufficiently inform the decisions about whether, where, when, and how oil and gas activity should occur in the Chukchi Sea. A large quantity of research cannot substitute for relevant research.

Existing scientific studies have been undertaken in an uncoordinated basis without an overarching purpose for the information or a clearly identified goal to advance knowledge of Chukchi Sea ecosystems. Specifically, many of the current scientific studies are focused on specific drilling lease sites that are of interest to industry. They provide information about physical and biological aspects (e.g., species) for a small area within a larger ecosystem for a limited time period. To be useful to leasing decisions, longer-term studies must be undertaken in order to provide an understanding of the variability of species over time. Moreover, the current piecemeal approach to science currently practiced by BOEMRE in its Environmental Studies Program Annual Study Plan, is not adequate. Narrow studies are undertaken by contractors responding to a request for proposal (RFP) with no coordinated analysis and synthesis of that information. Without an overarching purpose and scientific plan to guide and tie the research together, the individual studies do little to advance knowledge of the Chukchi Sea.

**Please Note:* This email includes 3 Attachments to be considered in the public record with this comment letter.

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PEW Attachment 1

List of references that are missing from the FEIS and SEIS and should be considered as essential

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PEW Attachment 3

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November 30, 2010

VIA EMAIL

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Re: Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (OCS EIS/EA BOEMRE 2010-034)

Dear Regional Director Goll:

Thank you for the opportunity to provide comments on the Draft Chukchi Sea Lease Sale 193 Supplemental Environmental Impact Statement (draft SEIS) prepared by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) pursuant to the National Environmental Policy Act. As discussed in the October 15, 2010 *Federal Register* notice, "The purpose of this SEIS (OCS EIS/EA BOEMRE 2010-034) is to provide new analysis in accordance with the United States (U.S.) District Court for the District of Alaska Order remanding the BOEMRE's Chukchi Sea Lease Sale 193 Final EIS (FEIS) (OCSEIS/EA MMS 2007-0026)" (75 FR 63504). The draft SEIS is dated September 2010, only a few weeks after the District Court's decision, so it appears that little new analysis was performed by BOEMRE despite the Court's mandate.

The Wilderness Society (TWS) contributed to and supports the comments submitted by Alaska Wilderness League, *et al.*, however we are submitting these comments to highlight additional items we would like BOEMRE to address. As for my background, I have over 25 years of engineering experience in the private, governmental, and non-profit sectors, and I am a licensed professional engineer in both Alaska and Maryland. I have presented invited testimony to Congress on numerous occasions on oil and gas issues, and I served as a technical advisor on the Department of the Interior's report to the President delivered on May 27, 2010, containing recommendations for BOEMRE following the *Deepwater Horizon* spill.

TWS's mission is to protect wilderness and to inspire Americans to care for our wild places. Since 1935, TWS has led the conservation movement in wilderness protection, writing and passing the landmark Wilderness Act and winning lasting protections for 109 million acres of wilderness including 56 million acres of spectacular and ecologically important lands in Alaska. TWS has approximately 225,000 members nationwide and over 750 members in Alaska who share an interest in how the Arctic Ocean is managed because of its inherent value and because decisions involving the Arctic Ocean could affect wild lands in northern Alaska. TWS has a strong concern for the sound management and the well-being of the largest public land management unit in the U.S., the National Petroleum Reserve – Alaska, with a good portion of its coastline located adjacent to the Chukchi Sea.

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TWS' Position on Offshore Drilling in the Chukchi Sea

TWS opposes platform-based offshore drilling in the Arctic Ocean including the Chukchi Sea at this time. It is premature to move forward with offshore drilling without:

1. Adequate scientific information on marine and potentially affected coastal resources (baseline data).
2. The baseline data needed for marine and coastal spatial planning.
3. Sufficient spill cleanup capabilities and infrastructure in place, and
4. BOEMRE promulgating needed regulations and ensuring sufficient drilling oversight via adequate enforcement resources, governmental accountability and transparency, and other measures.

Each of these points is discussed below. TWS believes the stakes are high regarding offshore drilling in the Chukchi at this time. Should there be a spill on the scale of the *Deepwater Horizon* tragedy, globally important marine food webs, habitat for iconic species like polar bears, and social and economic values sustaining vibrant indigenous communities likely would be adversely affected.

Baseline Data: The Arctic Ocean is one of the least studied and most poorly understood ecosystems in the world. Baseline data on Arctic Ocean ecology are critical because they allow decision-makers and the public to decide whether or not to put particular resources at risk and, if there is a major spill, to quantify damages to those resources. Without such data, decision-makers and the public cannot make informed choices about offshore drilling as they do not know the likely risks or true sensitivities of the area.

The non-profit organization [Oceana](http://oceana.org) has done an excellent job describing the scientific and policy rationales for more baseline data on the Chukchi Sea, including the relatively small cost of collecting these data, in its October 20, 2010 DRAFT document entitled *A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning* (see Appendix 1). This draft includes the following important and relevant paragraph:

The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately \$100 million over 5 years. By comparison, Lease Sale 193 alone generated \$2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefit, but it also poses considerable risks, economic and otherwise, to the benefits provided by a healthy marine ecosystem. (p. 9)

The data needs identified by Oceana regarding the Chukchi are essential for the science-based decision-making embraced by the Obama Administration. These needs clearly are not exorbitant in cost, particularly in light of the scale of potential oil and gas development in the Chukchi.

Unfortunately, the authors of BOEMRE's draft SEIS have taken an extremely narrow view of data needs. In Appendix A of the draft SEIS entitled "Analysis of Incomplete or Missing Information," BOEMRE lists the numerous statements from the 193 FEIS containing "incomplete or unavailable" information on marine and potentially affected coastal resources. BOEMRE states, however, that

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despite the large amount of incomplete or unavailable information its "analysts were generally able to complete thorough analyses and draw informed conclusions from the information available." How is this possible? It is only possible by accepting BOEMRE's conclusion that the incomplete or unavailable information was not "essential to a reasoned choice among alternatives" (Draft SEIS Appendix A, p. 1, emphasis in original). If one accepts BOEMRE's position that the alternatives in the FEIS are unalterable and largely indistinguishable with respect to potentially affected resources which TWS does not, then more ecological data likely would not change BOEMRE's conclusions. If, on the other hand, more data on whale presence or rare fish species in particular areas would alter the alternatives in the FEIS and the SEIS for example, that type of information absolutely would be relevant to decision-makers and the public.

While TWS agrees that not all impacts of development can be definitively known, it makes no sense to not evaluate those we can assess. In the draft SEIS, BOEMRE has made an unjustifiable choice to not research information gaps that might be relatively inexpensive and/or easy to remedy, including not utilizing any or all the relevant studies completed since the FEIS. As BOEMRE knows, the U.S. Geological Survey will complete a study early next year of scientific gaps in Chukchi Sea data – at a minimum, BOEMRE should wait until this study is out to see which types of data needs can be filled at a non-exorbitant cost before finalizing its SEIS.

Marine and Coastal Spatial Planning: Currently, public lands undergo planning processes which identify appropriate uses for all or portions of protected lands while our oceans undergo no such processes. The *Final Recommendations of The Interagency Ocean Policy Task Force report*, July 19, 2010, are a first step toward remedying that deficiency which results in inadequate environmental protection of the nation's oceans. The baseline data that would be collected for the Chukchi under Oceana's proposal could be used, among other things, to identify marine and coastal ecological "hotspots" (i.e., areas of high biological productivity or importance, including areas of cultural importance) which should be provided with increased protections from industrial and other activities that could harm them.

Among the Task Force's National Priority Objectives are two that are extremely relevant to the Chukchi: "**2. Coastal and Marine Spatial Planning:** Implement comprehensive, integrated, ecosystem based coastal and marine spatial planning and management in the United States" and "**8. Changing Conditions in the Arctic:** Address environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes" (p. 6). Pages 7-8 of the Task Force report provide details on a proposed implementation framework for marine and coastal spatial planning, including the Task Force's goal to have all plans completed by 2015.

Spill Cleanup Capability and Infrastructure: The *Deepwater Horizon* spill and its ongoing investigations demonstrate incontrovertibly that major oil spills from offshore drilling occur (even among the most well-funded operators), that some spills cannot be prevented as there is no failsafe mechanism for every situation, and that cleanup of more than a minimal amount of oil once it is in the ocean or onshore is difficult if not impossible. And those problems existed in a temperate environment with lots of infrastructure. The Arctic, in contrast, has extremely adverse weather and light conditions outside of summer and virtually no shore-based infrastructure currently including no Coast Guard facilities, no roads to communities so everything would arrive by air or boat, little housing for cleanup workers, etc.

On November 10, 2010, The Pew Environment Group published a peer-reviewed technical report entitled *Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unexamined Risks, Unacceptable Consequences*. This well-researched [report](http://www.pewenvironment.org) describes the numerous difficulties of Arctic spill response including the need for:

- Arctic oil spill trajectory modeling when ice is present.

- Testing of spill response technologies in Arctic conditions; likewise, the need to develop a “response gap” analysis for the percent of time that Arctic environmental conditions prevent the use of oil spill cleanup equipment (e.g., waves preventing boom use, ice preventing mechanical recovery, etc.).
- Infrastructure gaps to be assessed and addressed, and
- Credible worst-case scenario analyses, especially following what we know from the *Deepwater Horizon* spill (i.e., prior to that spill, BOEMRE considered blowouts unlikely which is no longer a credible position).

TWS supports the recommendations in the Pew report and its associated Policy Recommendations [report](#) and asks BOEMRE to address these recommendations in its response to comments for the draft SEIS.

Needed Regulations and Oversight. Without an adequate regulatory framework and effective enforcement and public transparency, BOEMRE is a toothless overseer of drilling operations and cannot prevent major oil spills. According to the FEIS:

Over the life of the hypothetical development and production that could follow from the lease sale, other effects are possible from events, such as a large, accidental oil spill or natural gas release. We estimate the chance of a large spill greater than or equal to 1,000 bbl occurring and entering offshore waters is within a range of 33-51%. (p. ES-4)

A 33-51% likelihood of a major oil spill shows that both the industry and its regulators currently tolerate a very high level of risk – imagine if there was that high a likelihood of a crash during the lifetime of an airplane. If so, would anyone fly?

During the one-month period following the *Deepwater Horizon* spill, I helped formulated the recommendations to the President issued in the DOI report entitled *Increased Safety Measures for Energy Development on the Outer Continental Shelf*. These recommendations for regulatory upgrades are only a beginning; it’s likely that the investigations and research following the spill will present additional statutory, regulatory, and oversight recommendations. As many of the regulatory recommendations will require research and public notice and comment, it likely will take several years – perhaps as long as 5-10 years – until they are all fully enacted (and by then, changes in the industry might require additional regulatory measures...). Additionally, BOEMRE needs to obtain the funds from Congress for adequate inspectors and enforcement personnel – it could take several years before BOEMRE has sufficient staffing.

As someone who has worked on pipeline safety issues for approximately 15 years, I know that government accountability and transparency is essential to ensure good performance by regulatory agencies. Thus, it will be important for BOEMRE in future years to post extensive user-friendly and sortable information on releases and their causes as well as information on its inspections, its enforcement actions, and its real-time monitoring of offshore operations. Of course, these activities also will take years to implement fully.

Chukchi Sea Spill Modeling and the Risk of Blowouts

According to the FEIS, “For purposes of analysis, we model one large spill of either 1,500 bbl (platform spill) or 4,600 bbl (pipeline spill)” (p. ES-4). While this information is not addressed in the draft SEIS, it should be because we now know as a result of the *Deepwater Horizon* spill that blowouts are not unlikely. And we know as a result of the 2009 Montara oil platform blowout off the coast of Australia, the 1979 Ixtoc oil platform blowout in the Gulf of Mexico, and the 1985 and 1987 gas blowouts in Cook Inlet discussed in my draft SEIS oral testimony (see Appendix 2) that blowouts can occur under shallow water conditions.

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Pat Pourchot, DOI Special Assistant to the Secretary for Alaska Affairs

TWS requests that a new SEIS contain a realistic large spill discharge, and that BOEMRE model the spill’s impacts on marine and coastal resources.

The Need to Differentiate Arctic Offshore Drilling from Lower 48 Offshore Drilling

While offshore drilling technologies are similar wherever they may be used, there are several key reasons why BOEMRE needs to treat Arctic drilling differently than Gulf of Mexico drilling and drilling elsewhere in the Lower 48. As discussed above, there is inadequate baseline data in the Chukchi and the conditions for cleanup are far tougher than in the Gulf, including the current inability of operators to provide effective cleanup in broken ice conditions. Moreover, the long periods of cold and darkness in the Arctic can result in increased worker safety concerns from fatigue and other causes. The Oil Spill Commission learned that in the case of the *Deepwater Horizon* certain critical supplies were not ordered as they would take too long to arrive – the supply situation would be much worse in the Arctic, likely increasing the drilling risks.

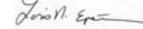
Additionally, the Arctic is more pristine and its resources seemingly more critical to coastal community residents since those in Arctic Slope villages have fewer alternatives for supplies than those living in Gulf communities. For all these reasons, there is a greater need for precautionary decision-making before allowing drilling in the Arctic as compared to drilling in the Gulf.

Problems with the Draft SEIS Public Hearing Process

Finally, TWS would like to express its concerns with the draft SEIS public hearing process. In addition to hearings in Arctic communities taking place immediately prior to and on election day which should not have been the case as it limited the participation of the interested public, the Anchorage public hearing on November 9 had a number of problems. The hearing room was too small to accommodate the crowd, and many people were forced to stand. There was no microphone, thus making it very difficult to hear those who testified. Indeed, BOEMRE asked those who testified to face the audience rather than the agency officials present at the meeting. BOEMRE did not allocate time equally among those who testified – some speakers were permitted to testify for much longer than their allotted two minutes while others were cut off after that time. Last, BOEMRE did not provide all those who signed up to testify an opportunity to speak, shutting the meeting down at exactly ten o’clock. BOEMRE needs to meaningfully and respectfully engage and hear testimony from the interested public at its hearings in the future.

In conclusion, the quick development of the draft SEIS document and its lack of new analysis – as requested by the Court – greatly concerns TWS. We continue to hope that BOEMRE will differentiate itself from its predecessor agency MMS and choose a more thoughtful, science-based approach to drilling in the Chukchi, an approach that recognizes and addresses the many current problems with offshore drilling in the Arctic. Thank you very much for your consideration of these comments.

Respectfully submitted,



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The Wilderness Society

Appendices

cc: Michael Bromwich, BOEMRE Director; Alan Thornhill, Ph.D., BOEMRE Science Advisor
Kim Elton, DOI Senior Advisor for Alaska Affairs

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A Comprehensive, Integrated Approach to Arctic Science and Local and Traditional Knowledge for Offshore Oil and Gas Planning

Introduction

The United States is at a crossroads with respect to planning and decision-making for offshore oil and gas activities in the Chukchi and Beaufort seas. President Obama and the Department of the Interior (DOI) must decide whether to continue with plans and approvals that are based on inadequate science and have generated controversy, litigation, and—as the blowout in the Gulf of Mexico demonstrates—the potential for environmental and social disaster. This document and the attachments provide a path forward that would use a comprehensive, integrated scientific research and monitoring plan to fill the gaps identified by scientists and courts and provide the necessary baseline information from which to make effective decisions.

At the heart of the controversy about offshore drilling in the Arctic is the widely acknowledged lack of scientific information about the Arctic Ocean. While we do know that the Arctic Ocean is important to life in coastal communities, has regions of high productivity that support varied ecosystems with iconic species of wildlife, helps regulate the planet’s weather and climate, and is changing rapidly, scientists know very little about how the Arctic Ocean functions or the ways in which it might respond to stresses from industrial activities. The lack of baseline information about the marine ecosystem was one of the bases for court decisions invalidating the 2007-12 Five-Year Leasing Program and Lease Sale 193 in the Chukchi Sea. Without this understanding, it is not possible to comply with statutory and regulatory mandates that were established to help ensure responsible stewardship of resources, including the Outer Continental Shelf Lands Act (OCSLA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA)

Moreover, the lack of baseline information creates a significant impediment to both effective planning and preparedness. The U.S. Commission on Ocean Policy stated as a principle tenet, “Ocean managers and policy makers need comprehensive scientific information about the ocean and its environment to make wise decisions.”¹ The final recommendations of the Interagency Ocean Policy Task Force (OPTF) call for science-based decision making and a better understanding of our ocean ecosystems, including a special emphasis on the Arctic.² The Obama administration implemented the final OPTF recommendations and has both the opportunity and obligation to obtain the necessary science and use it to guide decisions about industrial activities.³ By deferring future leasing in the Chukchi and Beaufort seas, calling for the U.S. Geological Survey Arctic (USGS) gap analysis, committing to science in the NOAA Arctic Strategic Plan, and creating the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the Obama administration has taken important steps toward allowing for comprehensive science and planning. At the same time, the government is in the process of determining how to respond to the court-ordered re-evaluation of Lease Sale 193 and the 2007-12 Five-Year Leasing Program, and Congress is debating legislation that includes provisions for better science in the Arctic.

The most effective way to respond to the courts’ orders and prepare for decisions about future industrial activities is to undertake comprehensive research and monitoring that would provide a fundamental understanding of the marine ecosystem. This research has not been done adequately before, and much of what has been done is decades out of date in a region that is changing rapidly. While it is true that DOI and industry have undertaken significant research, those efforts have been narrowly focused, applied

¹ U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century* (2004) at 374, available at <http://www.oceancommission.gov>.

² See Council on Environmental Quality, Final Recommendation Of The Interagency Ocean Policy Task Force (July 2009) at 6, 39-40, available at http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

³ Exec. Order No. 13547, 75 Fed. Reg. 43023 (2010).

studies designed to answer individual questions. Similarly, the National Science Foundation has funded significant cutting edge, hypothesis-driven basic research. While these efforts bolster our understanding of some processes in limited areas, they have not been conducted at the scale necessary to provide the holistic understanding of the ecosystem needed to make wise decisions about if and how industrial activities should proceed. Nor have they been conducted year-round—almost all of the existing studies focused solely on the summer months. The needed information is best obtained through year-round monitoring (including sampling for species distributions and abundance) and interdisciplinary research to elaborate trophic relationships, ecosystem structure and functioning, and other interactions.

Moving from uncoordinated studies to planned, integrated research would provide the necessary information, affordably, in a reasonable amount of time. In fact, the USGS gap analysis study, which has already started, could be the initial step. The results of that study—which should identify some of the largest and most pressing information gaps—should be used to help design the research program. The largest and most important information gaps almost certainly could be filled in 5-7 years for approximately \$20 million annually. Given the \$2.7 billion in revenue generated from Lease Sale 193 alone and the immense risks from oil and gas activities, this cost is neither exorbitant nor unwarranted. Such a comprehensive plan would provide many of the answers to the unknowns identified in the court proceedings relevant to Lease Sale 193 and the 2007-12 Five-Year Leasing Program and would provide the necessary information to make informed decision about whether to allow industrial activities and, if so, under what conditions.

State of Science About the Arctic Ocean

Very little is known about the Arctic Ocean, and in particular the Chukchi Sea. According to the U.S. Arctic Research Commission, the Arctic is “the least studied and most poorly understood area on Earth.”⁴ In particular, “The Arctic Ocean is the least well known ocean on the planet. We know more about the topography of the planets Venus and Mars than we do about the bathymetry of the Arctic Ocean.”⁵ Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. We recognize that the recent losses of sea ice during summer are fundamentally changing these ecosystems, but we still know little about the abundance and distribution of common species much less how the food webs work in this region.⁶

As part of the Lease Sale 193 litigation, the plaintiffs compiled a 38-page appendix of quotations from the Environmental Impact Statement that recognize the lack of available information about the Chukchi Sea.⁷ These citations are explicit recognitions by DOI and NOAA that there is significant missing information about even the most basic parameters for every one of the largest and most conspicuous animals in the ecosystem—all fish, marine mammals and birds—which in other regions are typically the most highly studied animals of an ecosystem. The missing information for these species includes abundance, distribution, and life history. This lack of basic information makes it difficult, if not impossible, to determine whether there will be significant impacts to the animals and the ecosystem. The state of information about the more charismatic animals in the ecosystem is further evidence of the lack of

⁴ U.S. Arctic Research Commission, Report on Goals and Objectives for Arctic Research at “A Message from the Chair” (2005), available at <http://www.arctic.gov/files/USARCCReportOnGoals2005.pdf>.

⁵ *Id.* at 6-7.

⁶ See Arctic Climate Impact Assessment, IMPACTS OF A WARMING ARCTIC 8, 10, 14-15, 24, 58-61 (2004); National Marine Fishery Service, Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis For the Arctic Fishery Management Plan And Amendment 29 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs 79-90, 99-105, 192, available at <http://www.fakr.noaa.gov/analyses/arctic/eairiffra0809/final.pdf>. (hereinafter “Arctic FMP EA”).

⁷ This appendix is Attachment 2 to this document.

Since the conclusion of the OCSEAP program, DOI’s studies in the Arctic Ocean have not been guided by an overarching monitoring and research plan. Instead, research priorities over the past several decades have been guided by an assumption that enough was known about the basics. DOI, therefore, focused “on topical studies in smaller areas to answer specific questions and fill identified information needs.”¹³ These applied research questions are important and have led to a better understanding of specific issues, such as the fall bowhead whale migration route through the Chukchi Sea. However, without continued monitoring of key parameters studied in OCSEAP it is now unclear if the base of information gained remains valid. Climate change has altered the region dramatically over the last 30 years and ecosystems have significant variability on yearly to decadal spans.

Thus, DOI stopped examining and monitoring the fundamentals and, instead focused on applied research without even tying those studies together in a framework or committing to update results. As a result, population and distribution data for several vulnerable species that play important roles in the marine ecosystem are either outdated or missing. For example, Arctic cod, which is potentially the most important fish species in this ecosystem, is indicated to be present throughout all of the U.S. EEZ, but no seasonal variation, concentration, or spawning area data are published at this time.¹⁴

The lack of comprehensive planning may account, at least in part, for conflicting statements made by DOI—first through the Bureau of Land Management then Minerals Management Service and now Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)—about the state of science in the Arctic. On the one hand, DOI has acknowledged repeatedly both that it lacks basic scientific information and needs good information for decision making.¹⁵ On the other hand, the agency points to the fact that it has spent \$350 million on research since 1973 across Alaska’s 15 OCS planning areas and, therefore, has a substantial understanding of the Arctic Ocean.¹⁶ The agency also has argued in court that the research undertaken gives it a sufficient basis for making decisions.¹⁷ The references in the Lease Sale 193 EIS discussed above about the lack of basic information for species runs directly counter to any assertions by DOI or BOEMRE that there is a broad base of information available for the Arctic from which to make decisions.

The National Science Foundation (NSF) also has funded important basic research in the Arctic Ocean. That research has been hypothesis-driven, meaning that it was designed to answer specific, cutting-edge scientific questions, including those about the specific impacts and feedbacks of climate change. While this cutting-edge research is important, it does not provide the basic, baseline information that is critical for making decisions, including what species live there, how many of them are there, and do those populations change from place to place and season to season. Much of that information simply is not available for the Arctic Ocean.

Similarly, industry has invested in significant scientific research, some of which may address important missing information. Currently, however, the results of those studies are not reliable because the data from industry studies are generally not made available publicly, and the degree to which other information about industry research is shared varies from study to study. Given the lack of transparency and the obvious conflict of interest for industry that would not want to share information that could potentially hinder development, there is a substantial risk of bias in the information that is shared. Unless

¹³ See Alaska Annual Studies Plan Final FY 2011 3 (October 2010), available at <http://alaska.boemre.gov/ess/ess/sp2011.pdf>.

¹⁴ See Arctic FMP EA at 79, 99, and 201; B. Bluhm & R. Gradinger, *Regional variability in food availability for Arctic marine mammals*, 18 Ecological Applications S77-S96 (2008).

¹⁵ See <http://www.doi.gov/whatwedo/energy/ocs/AlaskaRegion.cfm> (stating that the Arctic Ocean requires “additional scientific, environmental, and spill risk analysis before new areas are offered for leasing.”); see also Attachment 2 to this document detailing unknowns in Lease Sale 193 EIS.

¹⁶ See Alaska Annual Studies Plan Final FY 2011 at 1.

¹⁷ See *Native Village of Point Hope, et al. v. Salazar, et al.*, 1:08-cv-00004 (RRB), Fed. Def. Opp’n Br. at 12-17.

information about the rest of the ecosystem, including the clams, worms, sea stars and other species that are important prey for the more conspicuous species.

The lack of baseline science has also been highlighted by several other prominent local and federal agencies as well as international forums. In its comments on the Draft Proposed 2010-15 Five-Year Leasing Program, NOAA recommended using a precautionary approach to oil and gas activities for the Chukchi and Beaufort seas that prevents those activities until more information is available to support sustainable management.⁸ The Arctic Climate Impact Assessment, an international project of the Arctic Council and the International Arctic Science Committee, highlighted basic surveys and monitoring as well as ecosystem-based research as some of the highest priority research actions needed for Arctic marine waters.⁹ Further, the North Slope Borough has called for better baseline science to guide decisions, and Senator Begich has introduced legislation that calls for additional Arctic research and coordination.¹⁰

Moreover, where basic information about the marine ecosystem exists, much of it is old, spotty, and too sparse. For example, the Environmental Assessment for the Arctic Fishery Management Plan states that “data were scarce for estimating the abundance and biomass of fishes in the Alaskan Arctic.”¹¹ The review of potential data sources indicated that surveys for fish have occurred about every 15-20 years, but typically over different regions. Even if those surveys over the past 60 years were combined together (which would be inappropriate due to different sampling methodologies and other reasons), there are still major areas of the U.S. Arctic Ocean shelf region that have yet to be surveyed. These areas include those where commercial fisheries could reasonably be expected to develop and those within lease sale areas.

Additionally, the vast majority of existing studies have been conducted in summer months. We need a year-round understanding of the Arctic Ocean ecosystem. One stunning example of this is a seabird, the spectacled Eider. In the summer their population would be widely dispersed, but in the winter, the entire world’s population gathers together in a small area of the northern Bering Sea. If studies on this bird were only conducted in the summer, it would result in erroneous conclusions about the impacts of activities on this species, especially if activities occurred at or near their winter gathering area.

In addition, the Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impact statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Much of the environmental data input to the model is old; for example, current and wind information dates from 1979-1996. More sophisticated models are available and better information would allow for more effective analysis of the risks from spilled oil.¹²

While significant resources have been dedicated to studying particular Arctic animals and potential impacts to those animals from offshore oil and gas activities, we still lack critical baseline information about the ecosystem. The only studies designed to provide the comprehensive information and understanding of the health, biodiversity, and functioning of Arctic marine ecosystems and the potential impacts of industrial activities were conducted 30 years ago pursuant to the Outer Continental Shelf Environmental Assessment Program (OCSEAP). The information gained under that program did not initially cover the Chukchi Sea lease area and is so outdated as to be of very limited use in making decisions now for the Beaufort Sea.

⁸ See Letter from Jane Lubchenco, Ph.D. to S. Elizabeth Birnbaum, Re: Comments on the Interior Minerals Management Service Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015 (Sept. 9, 2009), at 5, available at http://www.peer.org/news/news_id.php?row_id=1265.

⁹ See Arctic Climate Impact Assessment, ARCTIC CLIMATE IMPACT ASSESSMENT 522 (2005).

¹⁰ See S. 1562, 111th Cong. (2010).

¹¹ Arctic FMP EA at 99.

¹² These problems are explained in more detail in Attachment 3 to this document.

all data and methods for all research projects are made available to the public, it is impossible to give selective results credence in the decisions about oil and gas activities.

Ultimately, when considered with the long list of studies performed over the last 15 years, the 38-page index of recognized unknowns about the Lease Sale 193 area is indicative of a systemic problem with the way research is being conducted in the Arctic. As a result of the narrow focus on applied research questions, while baseline research and monitoring is ignored, large sums have been spent to provide information about specific issues without providing decision-makers the information needed to make informed decisions about Arctic resources. One or two specific studies will not solve this problem. Rather, a more holistic research program is needed to fill the important information gaps related to almost every aspect of the ecosystem.

An Interdisciplinary, Integrated Research and Monitoring Program for the U.S. Arctic Ocean

At this point, it is incontrovertible that there are: substantial information gaps about Arctic marine ecosystems, a laundry list of studies that have been conducted, ongoing processes at BOEMRE in response to court orders to supplement the Lease Sale 193 EIS to better account for missing science and to revise the environmental sensitivity analysis and 2007-12 Five-Year Leasing Program; and a commitment by the new administration to bring science back to decision-making. President Obama and his administration must establish a path forward that harmonizes this situation and provides the basic information required to protect the resources of the Arctic, including the subsistence way of life. The most efficient way to accomplish these goals is through another OCSEAP-type program limited to the Beaufort and Chukchi seas.

To provide the basic information required to protect the resources of the Arctic, including the subsistence way of life, and to guide decisions about oil and gas and other industrial activities, a new comprehensive research and monitoring program should:

1. integrate existing information to give a more holistic picture of what is known and conduct an analysis of the gaps in information to determine the most pressing research and monitoring needs;
2. gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations;
3. track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways;
4. secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem structure and functioning, and effects of anthropogenic perturbations;
5. study potential ecological and sociological impacts; and
6. integrate these scientific data to identify Important Ecological Areas as well as processes and habitats that are sensitive and vulnerable to perturbation, and furnish a basis for marine spatial planning.

This program could easily be conducted in three simple phases over the next 5-7 years: 1) gap analysis and planning (2011-2012); 2) research and monitoring (2013-2016, with monitoring continuing into the future); and 3) integrating new and older information to provide decision-makers the basic understanding needed to make effective decisions (2016-2017). Each of these phases must be informed by local and traditional knowledge, including planning and peer-review.

Phase I: Gap Analysis and Planning

To develop a comprehensive, integrated research and monitoring program, scientists must first understand the existing information and gaps in knowledge. Based on that information, a research program can be devised, with public input, to fill the gaps.

New research and monitoring should build on what has been learned about the Arctic Ocean already. Thus, the first step in this process is to reconcile the large information gaps with the important research that has occurred. Existing information should be compiled and integrated, then an analysis conducted of the gaps that are left. This gap analysis would then drive creation of an integrated research and monitoring program. The USGS Arctic studies initiative is an important step in this direction, and should be followed by a more comprehensive analysis as called for in Senator Begich's Arctic Ocean Research and Science Policy Review Act of 2009.¹⁸

President Obama and Secretary Salazar have directed the USGS to assess "resources, risks, and environmental sensitivities in Arctic areas."¹⁹ The USGS will complete an initial review of Arctic science and issue a report in April 2011 that will "examine the effects of exploration activities on marine mammals; determine what research is needed for an effective and reliable oil spill response in ice-covered regions; evaluate what is known about the cumulative effects of energy extraction on ecosystems and other resources of interest; and review how future changes in climate conditions may either mitigate or compound the impacts from Arctic energy development."²⁰ That report should set the stage for a more comprehensive analysis that forms the basis for implementation of the necessary studies and monitoring.

The USGS study is an important initial effort to gather existing information and identify gaps in knowledge, but it is likely not to be sufficiently comprehensive and inclusive to form the basis of the necessary research and monitoring program. Thus far, DOI has insisted on keeping the study firmly and fully in the control of the USGS and BOEMRE. Despite the important knowledge and experience within those agencies, their expertise clearly does not encompass the broad interdisciplinary breadth inherent in the more comprehensive undertaking needed. Experts are needed from many fields, from climate and oceanographic sciences to population biology and community ecology as well as the social sciences to determine the breadth of potential impacts to local communities. Second, the guidance given by DOI to USGS mandates consideration of four particular subject areas, which focuses their study towards a narrower applied research path rather than the holistic picture of Arctic information needs. Lastly, a gap analysis and research and monitoring plan should be developed with opportunities for public input and a peer review process that helps ensure the study accurately describes the state of, and existing gaps in, Arctic information.

Based on a comprehensive gap analysis, government scientists, together with public input, should define a research and monitoring plan to fill information gaps. In the aftermath of the *Exxon Valdez* oil spill a similar analysis and development of a research plan was put together with the benefit of hindsight to address the shortcomings of knowledge in Prince William Sound and the Gulf of Alaska that became apparent after the spill. The Gulf of Alaska Ecosystem Monitoring and Research (GEM) plan was designed to provide critical information for both quantitatively predicting the potential impacts of another spill and determining the impacts from another spill. The GEM plan should serve as a modern model for the type of plan needed to guide research and monitoring in the Arctic. The research and monitoring plan put together for the U.S. Arctic Ocean should be developed with input from the public and evaluated by an independent panel of experts.²¹

Phase II: Research and Monitoring

Once the information gaps are identified and a research plan devised, the research and monitoring must be executed. As the known gaps in knowledge outlined above show, scientific research and monitoring should include:

¹⁸ S. 1562, 111th Cong. (2010).

¹⁹ See Secretary Salazar Unveils Arctic Studies Initiative that will Inform Oil and Gas Decisions for Beaufort and Chukchi Seas, available at http://www.doi.gov/news/pressreleases/2010_04_13_releaseA.cfm.

²⁰ *Id.*

²¹ An outline for such a plan for the Arctic Ocean is included as Attachment I.

Phase III: Data Integration

Once sufficient information is available from the research and monitoring outlined above, that information should be synthesized to demonstrate an understanding of ecosystem structure and functioning, including quantitative and robust models of the food web, and a determination of the important ecological areas of the region. Those models and information provide the basis from which to understand likely impacts of industrial activities and, accordingly, whether and how to allow them. Managers will be able to move from qualitative assertions (i.e., educated guesses) to making quantitative assessments of potential impacts and allow decision makers to weigh the costs and benefits of industrial activities and to find alternatives that could allow for development while protecting the ecosystem and subsistence way of life.

This new program would provide the answers to the unknowns identified in the Lease Sale 193 litigation by virtue of providing a basic understanding of the marine ecosystem. The missing information is broad in scope and covers major, fundamental components of the ecosystem. A comprehensive research and monitoring program, rather than ad hoc research will build this foundation of knowledge most efficiently.

In addition, having this basic information will avoid the problem that has arisen in the Gulf of Mexico, where development occurred with scant attention to the status of the ecosystem beforehand. As a result, we find ourselves wondering what was lost following development or an industrial accident because we did not evaluate what was there to begin with. Further, comprehensive, integrated research and monitoring could prevent that from happening in the Arctic, and a complete understanding of the ecosystem can drive response and restoration activities should an industrial accident occur.

Meeting Legal Requirements and Policy Goals

As explained above, an integrated, comprehensive research and monitoring program would be the most efficient way to provide the baseline necessary to make informed decisions about offshore oil and gas activities in the Arctic. Such a plan would build on the commitments to science already made by the administration and would be the most effective way to resolve the ongoing litigation and controversy.

Federal courts have invalidated the 2007-12 Five-Year Leasing Program and Environmental Impact Statement (EIS) for Lease Sale 193 in the Chukchi Sea. While the decisions rest on different grounds, the lack of scientific information about the Arctic Ocean. In the 2007-12 Five-Year Leasing Program that lack of scientific information resulted in an arbitrary analysis of the relative environmental sensitivity of marine areas. In the Lease Sale 193 context, the court found that the agency had not complied with a Council on Environmental Quality regulation, 40 C.F.R. § 1502.22, by failing to determine "whether missing information identified by the agency was relevant or essential" and then failing to determine "whether the cost of obtaining the missing information was exorbitant or the means of doing so unknown."

DOI has issued a draft proposed 2007-12 Five-Year Leasing Program and a Draft Supplemental EIS for Lease Sale 193. Neither document fully accounts for the missing information or makes an effort to put in place the necessary interdisciplinary, integrated research and monitoring. Both, however, are drafts, and DOI still has the opportunity to move forward in this way.

As explained above, there are 38 pages of references to scientific unknowns made by DOI and NOAA in planning for Lease Sale 193. The agency has an affirmative duty to get this information, including by performing research itself when necessary, if it is essential to its decision and not exorbitant in cost. Information is significant, essential, or important where without the information the agency cannot accurately assess the effects of various alternatives, the extent of certain problems, or the need for particular proposed actions.

Basic scientific information is essential at the lease sale stage. It is when BOEMRE evaluates alternatives about the size of the sale, deferral areas, and other limitations that may affect exploration and

1. Marine life assessment to provide a year-round picture of the species in each marine habitat and their population trends;
2. Environmental monitoring to measure atmospheric and physical ocean conditions, such as salinity and temperature, and biological factors, such as productivity and community richness and diversity;
3. Scientific process studies to understand the way in which the ecosystem functions and is likely to respond to stresses;
4. Studies designed to identify patterns of subsistence use and changes in well-being as well as potential impacts from industrial activities; and
5. Documentation of local and traditional knowledge.

This research and monitoring should be interdisciplinary, spanning from climate sciences to social impacts studies, and to the greatest extent possible, it should be conducted in an integrated fashion to better elucidate the processes that underlie the way in which the ecosystem functions.²² As demonstrated by the GEM plan, our understanding of how ecosystems work and the ways in which to study them has grown considerably since the original OCSEAP. Studies should be coordinated and integrated to measure multiple aspects of the ecosystem simultaneously, which will more effectively and efficiently elucidate many of the important drivers and links in the ecosystem.

Integrated research reveals relationships that are not apparent in focused single species or component studies. For example, scientists were able to determine that, as a result of climate change, productivity in the northern Bering Sea ecosystem was shifting from moving through seafloor communities to open water communities.²³ They were only able to do this by studying multiple aspects of the ecosystem simultaneously, including climate indices, sea ice concentration, water temperature, sedimentation, and seafloor biomass. In addition to providing better information, this type of integrated research and monitoring is more cost effective because more information is elucidated than would be from individual studies.

ConocoPhillips and Shell are conducting integrated research studies in the Chukchi Sea around two of their drilling prospects. They are simultaneously measuring physical, biological and chemical oceanographic parameters along with marine mammals, fish, birds and benthic invertebrates. While they are not sharing their data publicly, the results they present are intriguing.²⁴ Their work indicates that the Chukchi Sea is not a homogenous region, but instead potentially has a high degree of spatial complexity. The benthic topography of the Chukchi Sea appears to affect sea ice concentrations and ocean currents that in turn affect the distribution of productivity and how that productivity flows through the food web to invertebrates, fish, birds and marine mammals.

This example shows that integrated research can be—and, in fact, is being—conducted in the Arctic Ocean. ConocoPhillips' and Shell's research, however, is confined to areas around two of their drilling prospects during the open water season. With a concerted effort, this research could easily be expanded to the rest of the region and other seasons. Expanding this type of research and monitoring would provide decision-makers with the more complete picture needed to protect Arctic ecosystems and the subsistence way of life. The abundance and diversity of animals varies across this region, and decision-makers must understand that variability to determine which areas are most important and how to protect them from oil and gas and other industrial activities.

²² Integrated research seeks to provide information about multiple characteristics of the ecosystem and the ways in which they interact.

²³ J.M. Grebmeier, et al., *A major ecosystem shift in the northern Bering Sea*. 311 Science 1461-1464 (2006).

²⁴ See <http://doc.nprb.org/web/symposium/2010/2010%20AMSS%20Abstract%20Book.pdf> at 19-28.

development. Further, once the lease sale is held, companies have additional rights to conduct activities in the water that may affect sensitive species and habitats. Information that would be gathered by a comprehensive research and monitoring effort would allow for more effective consideration of alternatives and better evaluation of potential impacts.

Additionally, at the lease sale stage, BOEMRE should undertake a more detailed analysis than was conducted for the Five-Year Leasing Program, based on better information. This analysis is particularly important given the agency's current practice of preparing an environmental assessment, rather than full EIS to evaluate proposed exploration activities. If the agency prepares a programmatic-level analysis based on incomplete information at both the Leasing Program and Lease Sale stages, no detailed evaluation will be prepared until development is scheduled to occur. Neither OCSLA nor NEPA contemplate such a result.

Nor, as it appears to have done in the Draft SEIS for Lease Sale 193 should BOEMRE rely on analyses to be conducted by other agencies pursuant to other statutory mandates. Rather, the agency should abide Secretary Salazar's commitment to science and lead the way toward a better understanding of the ocean ecosystem by working with other expert agencies to put in place a comprehensive research and monitoring program.

The cost of this type of research and monitoring program is not exorbitant. The plan outlined in Attachment 1 could be carried out for approximately \$100 million over 5 years. By comparison, Lease Sale 193 alone generated \$2.7 billion in revenue to the federal government. At less than five percent of that revenue, the cost of the program is relatively small. Further, in considering whether the cost of obtaining additional data on the Chukchi Sea is exorbitant, BOEMRE must consider the risk and benefits of the governmental action at issue. Lease Sale 193 covers nearly thirty million acres of remote, undeveloped Arctic Ocean, and oil and gas activities would threaten the subsistence way of life, wildlife, habitat, and the marine ecosystem more generally. It may provide jobs and other economic benefit, but it also poses considerable risks, economic and otherwise, to the benefits provided by a healthy marine ecosystem.

These cost estimates are consistent with the other programs mentioned above. The GEM program was projected to cost \$120 million in 1999, and the OCSEAP program was estimated to cost \$25 million annually.

Conclusion

A careful, deliberate approach in the Arctic will allow for energy production if it can be done without harming the health of the marine ecosystem or opportunities for the subsistence way of life. The first step in such an approach is to develop and implement a comprehensive research and monitoring program like OCSEAP. We simply do not know enough now to make good decisions about stewardship for the oceans and clean energy. The first step toward resolving the ongoing controversy and litigation in the Arctic is to commit to obtaining basic science through an integrated, comprehensive research and monitoring plan that could help determine if industrial activities are appropriate; and if so, when, where and how such activities could be conducted.

Attachments

Number	Title
1	A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean (October 2010 Draft).
2	Compendium of Lease Sale 193 Unknowns – Exhibit 129 to Plaintiffs’ Motion for Summary Judgment in <i>Native Village of Point Hope, et al. v. Salazar, et al.</i> , 1:08-cv-00004 (RRB) (Feb. 2009).
3	Major Problems With Oil Spill Models (October 2010 Draft).

- B. Conduct periodic population assessments for exploited and selected important species. These assessments should be spatially explicit, and include migratory species (birds, marine mammals and some fish). These assessments will provide crucial baselines for evaluating impacts of industrial development and ecosystem change.

III. Environmental Monitoring

- A. Establish a network of fixed monitoring stations to track physical forcings and local biological responses. This station network should be patterned along the lines of the National Science Foundation’s Long Term Ecological Research Network (LTER) and NOAA’s oceanographic buoys adapted to the US Arctic Ocean, with sampling stations allocated to both the Chukchi and Beaufort seas. These stations will measure physical factors in the ocean including temperature and salinity, acidity, alkalinity and nutrients as functions of seawater depth, along with current profilers at strategically chosen locations; atmospheric factors including surface temperature, wind speed and direction, insolation, gas composition, and particulate density and composition; and biological factors such as primary and secondary productivity, zooplankton abundance and composition, benthic species presence, community richness and diversity, and community assemblages associated with sea ice.
- B. Support remote monitoring by satellite and aircraft to track sea ice extent, surface albedo and ocean color in collaboration with NOAA, NASA and NSIDC.
- C. Establish a systematic process for incorporating LTK for early detection of unanticipated ecosystem change, and for review by LTK experts for accuracy and completeness.
- D. Periodically update the resource assessments identified in “II” above to track ecosystem responses to climate change and industrialization.
- E. Monitor detection of invasive species, including species displaced by warming seawater temperatures to the south, and exotic species introduced by industrial activities.

IV. Scientific Process Studies

- A. Identify processes strongly coupled with biological production, species’ distribution and abundance, and support research that will improve understanding of them aimed at improving prediction of community responses to short- and long-term environmental stressors. This research should include identification of the species interactions that structure the biological community, which includes studies of the food web to determine linkages and energy flow through the ecosystem, as well investigations to determine the processes responsible for nutrient cycling.
- B. Prioritize research to initially emphasize known proximate sources of ecosystem stress, including processes strongly affected by transition from light limitation to nutrient limitation resulting from continued sea ice loss, effects of warmer water temperatures on growth and provisioning requirements of selected target species (especially young-of-the-year and juveniles), and sensitivity to acidification from increases in atmospheric carbon dioxide.

Attachment 1
A Scientific Research and Monitoring Plan for the U.S. Arctic Ocean

Compared with other marine ecosystems, very little is known about the living marine resources in the U.S. Arctic Ocean. We recognize that the recent losses of sea ice during summer are fundamentally changing the ways these ecosystems function, but we still know little about how these food webs work. Even our knowledge of what species inhabit the U.S. Arctic Ocean, either permanently or seasonally, is substantially incomplete. Permitting large-scale industrial activities in the absence of even basic knowledge of the composition and functioning of the marine ecosystem sets the stage for inadvertent environmental degradation at best, and catastrophic interactions at worst. The risks of adverse interactions are exacerbated by the rapid rate of environmental change in the Arctic, and our limited knowledge of existing resources and conditions makes it difficult even to detect ecosystem responses to change. The following science plan is intended as a guide toward systematically improving our knowledge of Arctic marine ecosystem structure and function.

The geographic scope of this science plan includes the exclusive economic zone (EEZ) of the U.S. Arctic Ocean, extending from the northern Alaskan coastline to the continental shelf break to the north, from the Bering Strait in the west to the Canadian border to the east. Most of the plan should be completed within four years. In recognition of the great scientific value of long-term data sets, however, the monitoring should be continued indefinitely, with at least a multi-decade planning horizon.

The essential elements of the plan are grouped into six categories: gap analysis, resource assessment, environmental monitoring, scientific process studies and synthesis. These elements are intended to (1) define existing information and research needs; (2) gain a more comprehensive catalogue of identified species, populations and habitats, including seasonal migrations, (3) track the physical forcing factors that modulate biological productivity, habitat occupancy and migration pathways; (4) secure a better understanding of trophic linkages, physical and biological processes affecting productivity and other facets of ecosystem functioning, and effects of anthropogenic perturbations; (5) study sociological impacts, and (6) integrate these scientific data to identify processes and habitats that are sensitive and vulnerable to perturbation and furnish a basis for marine spatial planning. Each of these constituent efforts must be informed by local and traditional knowledge (LTK) at all stages, including planning and peer-review.

I. Gap Analysis

- A. Conduct a comprehensive gap analysis to determine what scientific research is currently being done and what additional information is needed.

II. Marine Life Assessment

- A. Conduct a comprehensive survey of species occupying each marine habitat, including communities in the benthic, pelagic and littoral zones, and ice-associated communities. Whenever feasible these surveys should be conducted seasonally to identify migrations and patterns of periodic habitat use.

V. Sociological and Ecosystem Impact Studies

- A. Identify historical and current patterns of land and subsistence use, and conduct a survey of social and psychological well-being in North Slope communities to document current conditions in these communities.
- B. Monitor changes in patterns of land and subsistence use, and in measures of social and psychological well-being in North Slope communities affected by oil development.
- C. Conduct studies to determine potential impacts from industrial activities in the Arctic Ocean, such as research on the effects of noise on Bowhead whales, as well as the potential effects from produced waters, drilling muds, routine discharges, and other emissions on the ecosystem.

VI. Data Integration and Marine Spatial Planning

- A. Construct ecosystem models including a quantitative nutrient-phytoplankton-zooplankton (NPZ) model and an Ecopath model to evaluate how predicted ecosystem responses compare with data observed from the monitoring programs. Identified inadequacies will highlight areas requiring further research.
- B. Archive monitoring data in a publicly accessible database that is continuously maintained. Also, monitoring results should be periodically included in GIS maps to facilitate identification of Important Ecological Areas (IEAs) and important subsistence areas in the US Arctic Ocean and how they may change through time. Important Ecological Areas are geographically delineated areas with distinguishing characteristics that contribute disproportionately to an ecosystem’s health or are particularly vulnerable to disturbance.
- C. Integrate the results of the monitoring and research described above with a marine spatial planning effort that identifies IEAs as well as all potential energy sources and their availability to markets to help minimize the likelihood of adverse consequences associated with industrialization.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA

NATIVE VILLAGE OF POINT HOPE, et al.,
Plaintiffs,
v.
DIRK KEMPTHORNE, Secretary of the Interior, et al.,
Defendants,
and
SHELL GULF OF MEXICO, INC., and
CONOCOPHILLIPS COMPANY,
Intervenor-Defendants.

(EIS) for the Oil and Gas Lease Sale 193 and Seismic Surveying Activities in the Chukchi Sea (OCS EIS/EA MMS 2007-026) (May 2007). This contains statements in the EIS acknowledging missing information about the Chukchi Sea environment and the potential effects of the lease sale 193 on wildlife and subsistence. This declaration was compiled by an Earthjustice staff member under my direct supervision and reviewed by me.

I declare under penalty of perjury that the foregoing is true and correct.

Dated this 29th day of January, 2009.

s/ Erik Grafe
ERIK GRAFE

DECLARATION OF COUNSEL

I, Erik Grafe, hereby declare:

- 1. I am one of the attorneys representing Plaintiffs Native Village of Point Hope, et al., in this action. I submit this declaration in support of Plaintiffs' opening brief.
2. Attached to this declaration as Attachment A is a compendium of statements made by the Minerals Management Service (MMS) in its Final Environmental Impact Statement

Native Village of Point Hope, et al., v. Kempthorne, et al.,
Case No. 1:08-cv-00004-RRB

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Native Village of Point Hope, et al., v. Kempthorne, et al.,
Case No. 1:08-cv-00004-RRB

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LACK OF INFORMATION ABOUT SPECIES/HABITAT

I. FISH

A. General

“Surveys of coastal and marine fish resources in the Chukchi and Beaufort seas are typically conducted during periods that ice cover is greatly reduced (late July, August, or September) and information concerning the distribution, abundance, habitat use, etc., of marine fishes outside this period is limited. Due to the lack of specific information for many species, it is necessary to discuss the biology and ecology at the family level.” EIS at III-32.

“Despite these previous works, several data deficiencies remain. Information of current distribution and abundance (e.g., fish per square kilometer) estimates, age structure, population trends, or habitat use areas are not available for fish populations in the northeastern Chukchi Sea. Many fish studies reporting distribution and/or abundance are 20-30 years old. Other studies are still older. For example, the only survey of demersal fishes in the region is more than 20 years old. Fish assemblages and populations in other marine ecosystems of Alaska (e.g., Gulf of Alaska, Bering Sea) have undergone observable shifts in diversity, distribution, and abundance during the last 20-30 years; it is not known if the findings of Frost and Lowry (1983) still accurately portray the diversity and abundance of demersal fishes in the Alaskan Beaufort Sea. The same is true for other dated studies. It is possible that they no longer accurately and precisely reflect the current distribution, abundance, and habitat use patterns of fish resources in the northeastern Chukchi and western Beaufort seas. Such information could be stale, or in some cases, stagnant. If so, accurate information concerning the distribution, abundance, and habitat use patterns of fish resources is incomplete and/or unavailable from which to accurately and/or precisely assess environmental impacts from the Proposed Action.” EIS at III-32.

“Another important data gap is the lack of information concerning discrete populations for arctic fishes. The literature abounds with casual references made of various fish populations without having delimited the population other than by perhaps using arbitrary boundaries of a study area, or presenting data without discriminating one discrete population unit from another. Additionally, a few marine species are regarded as widespread and/or abundant, yet distribution and density statistics for discrete populations are scarce, unknown, and therefore, incomplete. Several species are known only from a single specimen of each species; others are known from perhaps a handful of specimens collected years to decades ago. Population information is entirely lacking for such species.” EIS at III-33.

“Fish resources of the northeastern Chukchi Sea were last surveyed 15-17 years ago. Additionally, other surveys over the years and area reflect a pattern of temporally and spatially irregular and disjunct sampling. Such disorganized sampling and data reporting greatly influences the information quality necessary to determine population trends and adjustments to environmental perturbations. Establishing a current, accurate, and precise baseline is critical to assessing potential changes to biotic resources. It is unknown if the distribution and abundance information gathered by the last surveys remains an accurate and precise description of arctic fish populations today. This is an important because the Chukchi and Bering seas are considered

to be large marine ecosystems serving as principle bellwethers to climate change in North America and the Arctic Ocean.” EIS at III-40.

“Adjustments by one or more fish populations often require adjustments within or among large marine ecosystems, influencing the distribution and/or abundance of competitors, prey, and predators. Consequently, it appears reasonable to believe that the composition, distribution, and abundance of fish resources in the northwestern Chukchi Sea is changing and is now different from that measured in the surveys conducted 15-17 years ago or earlier. The magnitude of these differences is unknown.” EIS at III-41.

B. Individual Species and/or Species Assemblages

1. Primary Arctic Fish Assemblages

“Marine waters support the most diverse, although least well known, fishes of the Alaskan Beaufort Sea region. Studies of marine fishes in the region are very limited; most of the surveys/studies have been performed in coastal waters landward of the landward of 200-m isobath, with scant surveys having sampled deeper waters. . . . [R]obust population estimates or trends for marine fishes of the region are unavailable. Distribution or abundance data for marine fish species are known only generally at the coarsest grain of resolution (for example, common, uncommon, rare). . . . Detailed information generally is lacking concerning the spread, density, or patchiness of their distribution in the overall Chukchi Sea region. Data concerning habitat-related densities; growth, reproduction, or survival rates within regional or local habitats; or productivity rates by habitat, essentially are unknown for fishes inhabiting waters seaward of the nearshore, brackish-water ecotone.” EIS at III-34 (internal citations omitted).

2. Neritic-Demersal Assemblage

“Life-history data for many of the demersal species using neritic substrates is lacking (e.g., whitespotted greenling, twohorn sculpin, spinyhook sculpin, veteran poacher); consequently, assessing the species resilience to perturbations is not feasible until additional information becomes available.” EIS at III-35.

3. Neritic-Pelagic Assemblage

“No species of this assemblage are assessed as being of low resilience, because life-history data are lacking.” EIS at III-35.

4. The Cryopelagic Assemblage

“Arctic cod and Pacific sand lance are assumed to be of medium resilience to exploitation; polar cod and toothed cod are data deficient such that an assessment of resilience is not feasible with available information.” EIS at III-36.

5. *Oceanic-Demersal Assemblage*

"Life-history statistics for most species covered in this assemblage are data deficient, chiefly for lack of fish surveys and studies in oceanic waters of the Alaskan arctic." EIS III-36.

6. *Diadromous Fishes*

"A number of diadromous species in the region have complicated life-history patterns that are not fully understood." EIS at IV-61.

7. *Salmon*

"Little is known of the movements undertaken during the 18 months the [pink] salmon spend at sea." EIS at III-39 (quoting Schmidt, McMillan, and Gallaway (1983)).

"Chum salmon fry, like pink salmon, do not overwinter in streams but migrate (mostly at night) out of streams directly to sea shortly after emergence. The timing of outmigration in the arctic is unknown, but occurs between February and June (chiefly during April and May) in more southern waters." EIS at III-40.

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However, we caution against over-interpretation of these data out of context of survey effort and, because these data were collected between 1979 and 1991, they should not be interpreted as indicating current use of the Chukchi Sea by bowhead whales; they are the best data available." EIS at III-50—51.

"Data are limited on the bowhead fall migration through the Chukchi Sea before the whales move south into the Bering Sea." EIS at III-51.

"The amount of feeding in the Chukchi Sea and Bering Strait in the fall is unknown as is the amount of feeding in the Bering Sea in the winter (Richardson and Thomson, 2002). Richardson and Thomson (2002:xxxviii) concluded that: "...behavioral, aerial-survey, and stomach-content data, as well as certain energetics data...show that bowheads also feed widely across the eastern and central Beaufort Sea in summer and fall." In mid- to late fall, at least some bowheads feed in the southwest Chukchi. Detailed feeding studies have not been conducted in the Bering Sea in the winter." EIS at III-54.

"There are locations in the Beaufort Sea and the western Chukchi Sea where large numbers of bowheads have been observed feeding in many years. However, the significance of feeding in particular areas to the overall food requirements of the population or segments of the population is not clear." EIS at III-55.

"Recent data on distribution, abundance, or habitat use [by bowheads] in the Chukchi Sea Planning Area are not available." EIS at III-55.

"[I]mportantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales." EIS at IV-82.

"Bowheads are not randomly distributed throughout the Proposed Action area. The extent of use of particular habitats varies among years, sometimes considerably; therefore, it is difficult to predict, in advance of a given year, exactly how bowheads will use the entire area that is available to them. Some aspects of their habitat use are poorly understood. For example, current data are not available on which to typify the current summer use of the northern Chukchi Sea by bowheads. For example, in the Beaufort Sea in some years, large aggregations of bowheads near Smith Bay have been observed during MMS' Bowhead Whale Aerial Survey Program (BWASP) surveys at the beginning of September. It is unclear if these animals are early migrants that have come from the east, if they summered in the northern portions of the Beaufort Sea and came south, or if they entered from the Chukchi Sea and never migrated east. . . . It is important to note that the Chukchi Sea data are not recent (1979-1991) and thus should not be interpreted as indicating current patterns of bowhead use of the Chukchi Sea." EIS at IV-101.

"We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined." EIS IV-102 (similarly at EIS at IV-105).

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II. MARINE MAMMALS

A. Whales1. *Bowhead Whale*

"There is scientific uncertainty about the population structure of bowheads that use the Arctic Ocean." EIS at III-45.

"Recent data to evaluate bowhead use of the Chukchi Sea Planning Area, or adjacent areas to the south, are lacking." EIS at III-45.

"No data are available indicating that, other than historic commercial whaling, any previous human activity has had a significant adverse impact on the current status of BCB Seas bowheads or their recovery." EIS at III-45.

"Conservation concerns include: . . . uncertain potential impacts of climate warming. . ." EIS at III-45.

"The uncertainty of the stock structure adds some uncertainty to summaries of the status of bowheads that may be impacted by the Proposed Action." EIS at III-45.

"[I]f whales become more 'skittish' and more highly sensitized following a hunt, it may be that their subsequent reactions, over the short-term, to other forms of noise and disturbance are heightened by such activity. Data are not available that permit evaluation of this possible, speculative interaction." EIS at III-46 (quoting NMFS' Arctic Region Biological Opinion).

"There is little information regarding causes of natural mortality for BCB Seas bowhead whales." EIS at III-49.

"Little is known about the effects of microbial or viral agents on natural mortality [of bowheads]." EIS at III-49.

"The amount of feeding [by the BCB Seas bowhead stock] in the Bering Sea in the winter is unknown as is the amount of feeding in the Bering Strait in the fall (Richardson and Thomson, 2002)." EIS at III-49.

"The MMS funded large-scale surveys in this [Chukchi Sea lease sale] area when there was oil and gas leasing and exploration, but while surveys in the Beaufort Sea have continued, the last surveys in the Chukchi Sea were about 15 years ago. These data were summarized by Mel'nikov, Zelensky, and Ainana (1997), Moore (1992), Moore and Clarke (1990), and Moore, DeMaster, and Dayton (2000). We have plotted counts of bowheads in the Chukchi Sea during those surveys (Fig. III.B-4), because they visually provide limited insight into areas where bowheads may be exposed to oil and gas activities should they occur in the Chukchi Sea Planning Area.

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"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

2. *Fin Whale*

"The NMFS has concluded that there is no reliable information about population-abundance trends, and that reliable estimates of current or historical abundance are not available, for the entire Northeast Pacific fin whale stock." EIS at III-46. *See also id.* at III-56 (similar).

"There are no recent data to confirm their use or lack of use of the Chukchi Sea Planning Area, or adjacent areas to the south." EIS at III-47.

"There is little information about natural causes of mortality (Perry, DeMaster, and Silber, 1999a). The NMFS summarized that 'There are no known habitat issues that are of particular concern for this stock' (Angliss and Lodge, 2002, 2005). Perry, DeMaster, and Silber (1999a:51) listed the possible influences of disease or predation as 'Unknown.'" EIS at III-56.

"The importance of specific feeding areas to populations or subpopulations of fin whales in the North Pacific is not understood." EIS at III-57.

"The possible influences of disease or predation and of overutilization [on fin whales] are listed [by NMFS] as 'Unknown.'" EIS at V-28.

3. *Humpback Whale*

"Available information does not indicate humpback whales inhabit the Chukchi Sea OCS project area. There are no recent data to confirm their lack of use of the Chukchi Sea OCS Planning Area, or adjacent areas to the south." EIS at III-47.

"There is 'no clear consensus' (Calambokidis et al., 1997:6) about the population stock structure of humpback whales in the North Pacific due to insufficient information (Angliss and Lodge, 2002) (see further discussion in USDOL, MMS,2003a,b)." EIS at III-58.

"Angliss and Outlaw (2005) stated that: 'There are no reliable estimates for the abundance of humpback whales at feeding areas for this stock' (the Western North Pacific Stock) 'because surveys of the known feeding areas are incomplete, and because not all feeding areas are known.' There are not conclusive or reliable data on current population trends for the western North Pacific stock (Perry, DeMaster, and Silber, 1999b; Angliss and Outlaw, 2005)." EIS at III-59.

"Causes of natural mortality in humpbacks in the North Pacific are relatively unknown, and rates have not been estimated." EIS at III-60.

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"The threat of disease or predation [on humpbacks] as [sic] unknown." EIS at V-29.

4. Gray Whale

"[E]xisting information is insufficient to understand the dynamics of gray whales and offshore Chukchi Sea habitat relationships, quality and quantity dynamics and distribution of prey resources, or the capability of habitat to support (carrying capacity) long- and short-term whale use." EIS, Vol. II, AC 019-076.

"[T]he relationship between the expanding gray whale population to amphipod community dynamics is unknown but is of considerable interest." EIS at V-35.

5. Beluga Whale

"Understanding the distribution and timing of movements of belugas is important for planning lease sales in the Chukchi Sea and designing possible mitigation measures. Late-summer distribution and fall-migration patterns are poorly known, wintering areas effectively are unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at IV-163. *See also id.* at III-77 (second sentence same).

"Based on recent telemetry studies on eastern Chukchi belugas, it is likely that members from both stocks occur in similar places and at similar times during the fall migration although the significance of this is unknown (Suydam, Lowry, and Frost, 2005)." EIS at III-76.

"Winter food habits of belugas are largely unknown . . ." EIS at III-77.

"Belugas generally are associated with ice and relatively deep water throughout the summer and autumn, which may reflect their preference for feeding on ice-associated arctic cod (Moore et al., 2000). Late-summer distribution and fall-migration patterns are poorly known, wintering areas are effectively unknown, and areas that are particularly important for feeding have not been identified (Suydam, Lowry, and Frost, 2005)." EIS at III-77.

6. Harbor Porpoise

"The harbor porpoise inhabits shallow, coastal areas in temperate, subarctic, and arctic waters of the Northern Hemisphere (Read, 1999). In the North Pacific, harbor porpoises range from Point Barrow, Alaska to Point Conception, California (Gaskin, 1984). In Alaska, three separate stocks have been recommended, although there is insufficient biological data to support the designation at this time." EIS at III-78.

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7. Minke Whale

"There are no reliable estimates for the Alaska stock of minke whales. A provisional estimate was made for the Bering Sea of 810 individuals; however, this is not used for the Alaska stock because the entire stock's range was not surveyed." EIS at III-78.

B. Other Marine Mammals

I. Seals

"Little is known about the biology or population dynamics of ice seals, and they have received little attention compared with other Bering/Chukchi Sea species known to be in decline. Accurate population estimates for ice seals are not available and are not easily attainable due to their wide distribution and problems associated with research in remote, ice-covered waters (Quakenbush and Sheffield, 2006). Although little is known about the population status of ice seals, there is cause for concern. Sea ice is changing in thickness, persistence, and distribution (Sec. III.A.4, Sea Ice), and evidence indicates that oceanographic conditions have been changing in the Bering Sea (Sec. III.A.3, Oceanography), which suggests that changes in the ecosystem may be occurring as well (Quakenbush and Sheffield, 2006)." EIS at III-71.

a. Ringed Seal

"No reliable estimate for the size of the Alaska ringed seal stock is available (Angliss and Outlaw, 2005) . . ." EIS at III-71.

b. Spotted Seal

"No reliable estimate for the size of the Alaska spotted seal stock is available (Angliss and Outlaw, 2005)." EIS at III-72.

c. Ribbon Seal

"Ribbon seals inhabit the North Pacific Ocean and the adjacent fringes of the Arctic Ocean. In Alaska, they range northward from Bristol Bay in the Bering Sea and into the Chukchi and western Beaufort seas. They are found in the open sea, on pack ice, and rarely on shorefast ice (Kelly, 1988). As the ice recedes in May to mid-July, they move farther north in the Bering Sea, hauling out on the receding ice edge and remnant ice (Burns, Shapiro, and Fay, 1981). Seal distribution throughout the rest of the year is largely unknown; however, recent information suggests that many ribbon seals migrate into the Chukchi Sea for the summer months (Kelly, 1988)." EIS at III-73.

"No reliable estimate for the size of the Alaska ribbon seal stock is available (Angliss and Outlaw, 2005)." EIS at III-73.

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d. Bearded Seal

"No reliable estimate for the size of the Alaska bearded seal stock currently is available (Angliss and Outlaw, 2005). Bengtson et al. (2005) conducted surveys in the eastern Chukchi Sea but could not estimate abundance from their data." EIS at III-74.

2. Pacific Walrus

"No reliable estimate is currently available for the size of the Alaskan stock of Pacific walrus (Angliss and Outlaw, 2005). However, available evidence indicates that the population is likely in decline (Kelly, Quakenbush, and Taras, 1999; Kochnev, 2004)." EIS at III-74. *See also id.* at EIS at III-76 (first sentence same).

"The population size has never been known with certainty; however, the most recent survey estimate was approximately 201,039 animals (Gilbert et al., 1992)." EIS at III-76.

3. Polar Bear

"A reliable estimate for the CBS stock of polar bears, which ranges into the southern Beaufort Sea, does not exist, and its current status is in question. In 2002, the IUCN/SSG Polar Bear Specialist Group estimated the size of the CBS population at 2000+ bears, though the certainty of this estimate was considered poor (Lunn, Schliebe, and Born, 2002)." EIS at III-84.

"Coastal areas provide important denning habitat for polar bears. Terrestrial denning areas for bears of the CBS polar bear stock are less well understood than those for the SBS polar bear stock." EIS at IV-166.

"The maximum reproductive age for polar bears is unknown, but is likely well into their 20's (Amstrup, 2003)." EIS at III-81.

"[W]ith the collapse of the Soviet empire in 1991, levels of illegal harvest dramatically increased in Chukotka in the Russian Far East (Amstrup, 2000; USDOI, FWS, 2003). While the magnitude of the Russian harvest from the CBS is not precisely known, some estimates place it as high as 400 bears per year, although the figure is more likely between 100 and 250 bears per year." EIS at III-84. *See also id.* at V-36 (same).

"[B]ecause of the unknown rate of illegal take currently taking place, in 2006 the IUCN/SSG Polar Bear Specialist Group designated the status of the CBS stock as "declining" from its previous estimate of 2000+ animals (IUCN/SSG Polar Bear Specialist Group, 2006)." EIS at III-84.

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III. MARINE AND COASTAL BIRDS

I. General

"Despite the importance [for marine and coastal birds] of [Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson], as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

2. Threatened Spectacled Eiders¹

"In general, population demography for this species and in particular breeding information (i.e., timing of pair formation and duration of pair bonds, timing of mating, male and female dispersal rates, sex-specific estimates for natal, breeding, and molt-site fidelity, breeding propensity, nonbreeding component, duckling/brood and first-year survival, etc.) is poorly understood due to a lack of long-term marking/monitoring programs and/or low resighting/recapture/recovery rates." BE at 23.

"Few data are available on the overall longevity of spectacled eiders, but if similar to other eiders, they would likely be long-lived." BE at 23.

"Recruitment rate of spectacled eiders is unknown (USFWS 1999)." BE at 25.

"Migration routes [of spectacled eiders] in the spring are not well known . . ." BE at 25.

"The summer range of non-breeding [spectacled] eiders is not known . . ." BE at 26.

"Food habits of spectacled eiders in the Ledyard Bay molting area remain unknown." BE at 27.

"The world population of spectacled eiders has declined substantially during the past 30 years, and may be continuing to decline (USFWS 1999, 2002b). Long-lived species like spectacled eiders typically do not have highly variable populations and unknown mortality factors may be undermining their ability to maintain a stable population. The causes of decline could be varied and are largely unknown . . ." BE at 28.

¹ From Minerals Management Service, Biological Evaluation of Spectacled Eider (*Somateria fischeri*), Steller's Eider (*Polysticta stelleri*), and Kittlitz's Murrelet (*Brachyramphus brevirostris*) for Chukchi Sea Lease Sale 193 (September 2006), incorporated by reference into the Lease Sale 193 EIS at III-61, IV-125, V-30.

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"Variability in the abundance of the Alaska breeding population of spectacled eiders is not well understood (USFWS 1999)." BE at 28.

"The Alaskan and Russian populations of spectacled eider were listed as a threatened species on 9 June 1993 (USFWS 1993). Although the factors that caused these declines are unknown, a number of potential contributory factors have been identified. These, or other still-undefined threats, have increased mortality above the rate of reproductive replacements. No data are available to show whether similar trends have affected the breeding population in Russia where as many as 40,000 pairs traditionally nested." BE at 29.

3. Threatened Steller's Eiders²

"[T]he length of time that Steller's eiders remain paired is unknown." BE at 13.

"Many life history aspects of Steller's eiders (e.g., timing of pair formation, duration of pair bonds, dispersal rates, sex-specific seasonal site fidelity, first-year survival, etc.) are poorly understood." BE at 13.

"The reason for relatively low nesting success or failure to nest by the Alaska nesting population is unknown, but may be related to predators switching to alternate prey when lemmings are in low abundance (Quakenbush and Suydam 1999)." BE at 15.

"Steller's eider recruitment rates are unknown (USFWS 2002b)." BE at 15.

"Departure from the [Arctic Coastal Plain] to molting areas is poorly documented, but males probably begin departing as early as late June, followed by non- and failed nesting females presumably from late July – late August, and finally successful females and fledged young." BE at 16.

"The population of Steller's eiders molting and wintering along the Alaska Peninsula appears to be declining (USFWS 1999, 2002a). . . . The causes of decline could be varied and are largely unknown, but if the cause of the decline is within the marine environment, it is reasonable to conclude that the Alaska and Russia nesting populations are being affected similarly because a large portion of the Russian population winters with the Alaskan population." BE at 18.

"Variability in the abundance of the Alaskan breeding population of Steller's eiders is not well understood." BE at 18.

"Williamson et al. (1966) listed Steller's eiders as occurring in the Cape Thompson area 25 miles southeast Point Hope during surveys for Project Chariot at Ogotoruk Creek. Steller's eiders were listed as occupying marine littoral, lacustrine, and beach environments in order of affinity. In this

² See note 1.

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study, marine littoral waters extended seaward 2 miles from shore. Steller's eiders were listed as present from June 1 through October 4 and uncommon, but possibly breeding in the area. It is not known if Steller's eiders still nest in this area." BE at 20-21.

4. Kittlitz's Murrelets³

"The Kittlitz's murrelet (*Brachyramphus brevirostris*) is one of the rarest and least understood seabirds in North America. There is limited life history information on the Kittlitz's murrelet (i.e., age at first breeding, nest success, hatching success, fledging success, first-year survival, survival to breeding age, proportion of breeding females, proportion of non-breeders, periodic non-breeding, etc.) and mechanisms of population regulation. The limited information available for this species and research on the closely-related marbled murrelet suggests a *K*-selected life history strategy." BE at 33.

"The longevity of the Kittlitz's murrelet is unknown . . ." BE at 33.

"Age to maturity in Kittlitz's murrelets is unknown . . ." BE at 33.

"Little is known about the reproductive strategy of Kittlitz's murrelet because nesting sites are difficult to find (Day et al. 1999)." BE at 33.

"Annual breeding effort is poorly understood, but is considered highly variable." BE at 33.

"Spring migration for Kittlitz's murrelets in the Chukchi Sea is unknown . . ." BE at 34.

"Little is known about Kittlitz's murrelet recruitment . . ." BE at 34.

"Annual adult survival has not been estimated . . ." BE at 34.

"Though there is some evidence for long-term population declines for *Brachyramphus* murrelets (van Vliet and McAllister 1994, Ralph et al. 1995, Kuletz et al. 2003), Day et al. (1999) argued that evidence for major population declines for the Kittlitz's murrelet was equivocal. In large part, their conclusion stems from the fact that historical population estimates are lacking (but see Isleib and Kessel 1973, Agler et al. 1998, Kendall and Agler 1998)." BE at 34.

"Fall migration in the Chukchi Sea population [of Kittlitz's murrelet] is unknown . . ." BE at 35.

"Post-breeding distribution [of Kittlitz's murrelet] is poorly understood, but is likely farther offshore than pre-breeding season." BE at 35.

"Winter distribution [of Kittlitz's murrelet] is poorly understood, but is probably pelagic." BE at 35.

³ See note 1.

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"The diet of the Chukchi Sea summer residents is unknown . . ." BE at 35.

"Winter foods are unknown, but may consist mostly of pelagic euphausiids or other macroinvertebrates." BE at 35.

"Information regarding fidelity to nesting sites is not available (Day et al. 1999)." BE at 35.

"[Causes for the declines [in Kittlitz's murrelets] are not well known, but likely include: habitat loss or degradation, increased adult and juvenile mortality, and low recruitment, and we believe that glacial retreat and oceanic regime shifts are the factors that are most likely causing population-level declines in this species." BE at 36 (citing USFWS status review, 2004).

5. Cliff-Nesting Seabirds

a. Murres

Noting "limited data." EIS III-62.

b. Puffins

"The current status of horned puffins in the Chukchi Sea is unknown." EIS III-62.

"The current status of the tufted puffin in the Chukchi Sea is also unknown." EIS III-62.

c. Black-Legged Kittiwake

"The current status of the black-legged kittiwake (*Rissa tridactyla*) in the Chukchi Sea is unknown." EIS at III-63.

"The portion of [Chukchi] population in the proposed lease sale area is unknown, but could be substantial late in the open-water season. Seasonal areas of concentration, if any, are unknown." EIS at III-63. See also *id.* at IV-142 (similar).

"Current population estimates at [Cape Thompson and Cape Lisburne] colonies are unknown." EIS at IV-143.

6. Bering Sea Breeders and Summer Residents

a. Northern Fulmar

"The current status of the northern fulmar (*Fulmarus glacialis*) is unknown." EIS at III-63.

b. Short-Tailed Shearwater

"The current status of the short-tailed shearwater (*Puffinus tenuirostris*) in the Chukchi Sea is unknown." EIS at III-63.

c. Auklets

"The current status of parakeet (*Cyclorhynchus psittacula*), least (*Aethia pusilla*) and crested (*A. cristatella*) auklets in the Chukchi Sea is unknown." EIS at III-63.

7. High Arctic-Associated Seabirds

a. Black Guillemot

"The current status of the black guillemot (*Cephus grylle*) in the Chukchi Sea is unknown." EIS at III-63.

b. Ivory Gull

"The current status of the ivory gull (*Pagophila eburnea*) in the Chukchi Sea is unknown. Divoky (1987) reported that ivory gulls are closely associated with the ice edge throughout their lifecycle. Ivory gulls are considered uncommon to rare in pelagic waters of the Chukchi during summer, and small numbers migrate through in fall to wintering areas in the northern Bering Sea." EIS at III-64.

c. Arctic Tern

"The current status of the Arctic tern (*Sterna paradisaea*) in the Chukchi Sea is unknown." EIS at III-64.

8. Tundra-Breeding Migrants

a. Jaegers

"The current status of [all three species of] jaegers in the Chukchi Sea is unknown." EIS at III-64.

b. Glaucous Gull

"The current status of the glaucous gull (*Larus hyperboreus*) in the Chukchi Sea is unknown." EIS at III-64.

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9. Waterfowla. Yellow-Billed Loons

"Compared to what is known about yellow-billed loons near the Beaufort Sea coast, there is very little known about the coastal areas bordering the Chukchi Sea." EIS at III-65.

"The [yellow-billed loon] is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown." EIS at IV-140.

b. Common Eider

"During spring migration, the common eider (*Somateria mollissima*) typically migrates along the Chukchi Sea coast, using offshore open-water leads. Offshore migration distances are poorly understood for the Chukchi Sea, but in the Beaufort Sea they are usually found within 48 km (29 mi) of shore." EIS at III-66.

c. Pacific Brant

"The current status of the Pacific brant along the Chukchi Sea is unknown." EIS at III-68.

d. Greater White-Fronted Geese

"The current status of greater white-fronted geese along the Chukchi Sea coast is unknown." EIS at III-68.

e. Lesser Snow Goose

"Ritchie et al. (2006) reported that the number of snow geese nesting on the Ikpiukuk River delta continued to increase substantially from numbers recorded prior to 1999. There are no comparable data for the Kukpowruk River delta colony." EIS at III-68.

10. Shorebirdsa. Buff-Breasted Sandpiper (species of concern)

Noting "limited data." EIS III-70.

b. Bar-Tailed Godwit (species of concern)

"The abundance and distribution of bar-tailed godwits in northern Alaska and coastal areas of the Chukchi Sea are not well understood." EIS at III-69.

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"The North American population of bar-tailed godwits (*Limosa lapponica baueri*) breeds in western and northern Alaska. Postbreeding bar-tailed godwits move to staging grounds along the Bering Sea Coast and then apparently fly nonstop 11,000 km to New Zealand. Recent counts conducted at both breeding and nonbreeding sites provide evidence of a serious and rapid population decline (McCaffrey et al., 2006), but the cause of the decline is unknown." EIS at III-69.

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LACK OF INFORMATION ABOUT EFFECTS ON SPECIESI. FISHA. General1. General effects of seismic on fish

"A review of available science and management literature shows that at present, there are no empirical data to document potential impacts from seismic surveys reaching a local population-level effect. The experiments conducted to date have not contained adequate controls to allow us to predict the nature of a change or that any change would occur." EIS at II-33. *See also id.* at IV-51—52 (similar) and IV-74 (similar).

2. General effects of oil spills on fish

"Given a lack of contemporary abundance and distribution information, large oil spill effects on rare or unique species (including potential extirpation) could occur, but would likely go unnoticed or undetected." EIS at II-34. *See also* EIS at IV-52 and IV-74 (similar).

"While small-spills are required to be reported, the number of unreported spills is unknown. Not all spills would be expected to receive a spill-response. Overall, it is unclear whether, over the long-term and in the absence of a monitoring program to assess effects, any negative impacts to fish resources from chronic small spills would be detected." EIS at IV-72.

B. Effects on Marine Pelagic Species

"Effects on recruitment would be particularly difficult to assess, because very few studies of offshore fishes have been made." EIS at IV-61.

C. Effects on Capelin

"Eggs deposited in the proximity of the contaminated substrate over a series of years likely would be exposed to oil (PAH's) retained in the substrate, as PAH's in weathered oil can be biologically available for long periods and very toxic to sensitive lifestages, subsequently leading to lethal and sublethal effects to those offspring of successive generations. It is not known what such a behavioral response may have on the dynamics of the population; however, the spawning site likely would be unavailable for use for multiple generations, depending on the sensitivity of the capelin to detecting contaminated substrates and how long the oil persists in the localized habitat." EIS at IV-60-61.

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"Also unknown are the distribution and abundance of spawning sites used by capelin in the Alaskan Arctic." EIS at IV-63.

D. Effects on Arctic Cod

"Although arctic cod can be extremely abundant in nearshore lagoonal areas, the importance of nearshore versus offshore environments to the lifecycle is not known (Craig et al., 1982). Although it is known that juvenile arctic cod associate with floating ice, it is unknown to what degree this association contributes to the development and survival of young fishes later recruiting to the breeding population. If early lifehistory stages of arctic cod were concentrated in nearshore environments, in patches in the open ocean, or under floating ice, they certainly would be more vulnerable to effects from an oil spill impacting such habitats." EIS at IV-62.

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II. MARINE MAMMALS

A. General

1. Effects on Marine Mammals in General

"Based on the paucity of information available on marine mammal ecology in the Chukchi Sea and on specific locations of future developments, we are unable to determine at this time if significant impacts will or will not occur." EIS at II-37.

"[B]ecause of the lack of data on marine mammal distributions and habitat use in offshore areas of the Chukchi Sea, it is uncertain what the level of effects would be in offshore areas [regarding Alt. III]. EIS at II-42. See also *id.* at IV-269 (same) and EIS at II-45 (same, re: Alt. IV).

"Because there are no oil and gas production facilities in the Chukchi Sea, it is difficult to predict with certainty what potential impacts from such development would have on threatened and endangered marine mammals." EIS at IV-111.

"Unfortunately, it has not been possible to predict the type and magnitude of marine mammal responses to the variety of disturbances caused by oil and gas operations and industrial developments in the Arctic. More importantly, it has not been possible to evaluate the potential effects on populations." EIS at IV-152.

"In light of the uncertainty over the potential impacts of exploration and development activities, the earliest possible establishment of long-term monitoring programs for vulnerable species in the project area should be pursued. The design of long-term monitoring should take into account the likely size of any effect and the probability of detecting it within a reasonable time span (IWC, 2006)." EIS at IV-162--63.

"[W]ithout historical data on distribution and abundance, it is not possible to measure the impacts of an oil spill on marine mammals." EIS at IV-156.

"Based on the paucity of information available on marine mammal ecology, and specifically on habitat use patterns, in the Chukchi Sea and based on the lack of specific information regarding the location of future developments, we are unable to determine at this time if significant impacts would or would not occur to marine mammal populations in the project area as a result of the Proposed Action." EIS at IV-145.

"Careful mitigation can help reduce the effects of future industrial developments and their accumulation through time. However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and decreased reproductive success. Because of the lack of data on which to base informed decisions, it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an

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B. Whales

1. General

"The need to rely on indirect methods of assessing the environmental impact of human activity on marine mammals is a recurring problem (Inglis and Gust, 2003). Impact assessments for cetaceans typically emphasize immediate behavioral responses to human activities (Samuels and Bejder, 2004), the biological relevance of which is rarely known (Corkeron, 2004)." EIS at IV-154.

"[M]onitoring plans typically emphasize readily obtainable, short-term behavioral measures that can be directly related to disturbance factors (Bejder et al., 2006). However, it is rarely known in what ways short-term responses translate to longer term changes in reproduction, survival, or population size (Gill, Norris, and Sutherland, 2001; Beale and Monaghan, 2004a), and it is seldom possible to infer biological significance based on short-term behavioral observations." EIS at IV-154.

a. Effects from seismic/noise on whales in general

"[T]here is acknowledged . . . scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales." EIS at IV-82.

"There are very few, if any, data available about potential effects of . . . noise . . . on cetacean calves." EIS at IV-82.

"[T] here are few instances where data are sufficient to evaluate the total energy exposure of a marine mammal from a given source. At present, we do not have the data necessary to make such a determination or understand how it might change our analysis." EIS at IV-86.

"While there is some general information available, evaluation of the impacts of noise on marine mammal species, particularly on cetaceans, is greatly hampered by a considerable uncertainty about their hearing capabilities and the range of sounds used by the whales for different functions (Richardson et al., 1995a; Gordon et al., 1998; NRC, 2003, 2005). This is particularly true for baleen whales. Very little is known about the actual hearing capabilities of the large whales or the impacts of sound on them, especially on them physically. While research in this area is increasing, it is likely that we will continue to have great uncertainty about physiological effects on baleen whales because of the difficulties in studying them. Baleen whale hearing has not been studied directly. There are no specific data on sensitivity, frequency or intensity discrimination, or localization (Richardson et al., 1995a). Thus, predictions about probable impacts on baleen whales generally are based on assumptions about their hearing rather than actual studies of their hearing (Richardson et al., 1995a; Gordon et al., 1998; Ketten, 1998)." EIS IV-87.

"Based on indirect evidence, at least some baleen whales are quite sensitive to frequencies below 1,000 Hz but can hear sounds up to a considerably higher but unknown frequency." EIS IV-87.

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adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area. Increasing vessel traffic in the Northwest Passage, defined as the marine route between the Pacific and Atlantic oceans through the Arctic Ocean across the top of North America, which includes the Proposed Action area, increases the risks of oil and fuel spills and vessel strikes of marine mammals." EIS at IV-145--46.

"Because very little is known about the distributions, population sizes or habitat use of marine mammals in the Chukchi Sea, it is difficult to determine if significant impacts will or will not occur to marine mammals as a result of the proposed action." EIS at V-32.

2. Effects of Seismic and Other Noise on Marine Mammals

"Because of the lack of data it is unknown if noise introduced into the environment from industrial activities, including drilling and seismic operations, will have an adverse impact on nonendangered and nonthreatened marine mammals in the Proposed Action area." EIS at II-37. See also EIS IV-145--146 (similar).

"Despite the increasing concern and attention noted above, there still is uncertainty about the potential impacts of sound on marine mammals; on the factors that determine response and effects; and especially on the long-term, cumulative consequences of increasing noise in the world's oceans from multiple sources (NRC, 2003, 2005). The NRC (2005) concluded that it is unknown how or in what cases responses of marine mammals to anthropogenic sound rise to the levels of biologically significant effects. This group also developed an approach of injury and behavioral "take equivalents". These take equivalents use a severity index that estimates the fraction of a take experienced by an individual animal. This severity index is higher if the activity could be causing harassment at a critical location or during a critical time (e.g., calving habitat). Because we have uncertainty about exactly where and how much activity will occur, the recommendations from the NRC (2005) are qualitatively incorporated in MMS analysis." EIS at IV-86.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown . . ." EIS IV-89.

"Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift to hearing] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS IV-147.

3. Effects of Oil Spills on Marine Mammals

"There are few post-spill studies with sufficient details to reach firm conclusions about the effects, especially the long-term effects, of an oil spill on free-ranging populations of marine mammals." EIS at IV-115.

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"Repeated long exposures to intense sound or sudden onset of intense sounds generally characterize sounds that cause permanent threshold shift in humans. Ketten (1998) stated that age-related hearing loss in humans is related to the accumulation of permanent-threshold shift and TTS damage to the ear. Whether similar age-related damage occurs in cetaceans is unknown." EIS at IV-88.

"There are no data on which to determine the kinds or intensities of sound that could cause a [temporary threshold shift, TTS] in a baleen whale." EIS at IV-88.

"Little data are available about how, over the long term, most marine mammal species (especially large cetaceans) respond either behaviorally or physically to intense sound and to long-term increases in ambient noise levels. Large cetaceans cannot be easily examined after exposure to a particular sound source." EIS at IV-88.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking. As noted previously, the assumption is made that the area of greatest hearing sensitivity is at frequencies known to be used for intraspecific communication. However, because real knowledge of sound sensitivity is lacking, we believe it is prudent to assume in our analyses that sensitivities shown by one species of baleen whale also could apply to another. This reasonable approach provides the means to infer possible impacts on other species (such as the fin whale), especially when using studies on a species such as the humpback, which uses a large sound repertoire in intraspecific communication." EIS at IV-89.

"It is not known whether (or which) marine mammals can . . . and do adapt their vocalizations to background noise." EIS at IV-89 (internal citation omitted).

b. Effects from oil spills on whales in general

"There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of . . . oil spills on cetacean calves." EIS at IV-82.

"There are no data available to MMS that definitely link even a large oil spill [associated with seismic surveys] with a significant population-level effect on a species of large cetacean." EIS at IV-103.

"Data are not available that would permit evaluation of the potential for long-term sublethal effects [from oil spills] on large cetaceans." EIS at IV-115.

"[T]he potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-115.

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"With whales, even when unusual changes in abundance occur following an event such as the EVOS (as with the disappearance of relatively large numbers of killer whales from the AB pod in Prince William Sound) (Dahlheim and Matkin, 1994), interpretation of the data is uncertain and is often controversial due to the lack of supporting data, such as oiled bodies or observations of individuals in distress (and, in that case, the existence of a viable alternate explanation of the probable mortality). Thus, the potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from a large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects. EIS at IV-115. *See also id.* at IV-117 (latter two sentences similar).

"It is not clear how long crude oil would remain on a free-ranging cetacean's skin once it was oiled." EIS at IV-117.

"The potential effect of crude oil on the function of the cetacean blowhole is unknown." EIS at IV-118. *See also id.* at IV-159.

"The effects of an oil spill on cetacean newborns or other calves and the potential effects of contact or detection of spilled oil by near-term, or post-partum females are not known." EIS at IV-121.

"[T]he potential for long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans is unknown. However, observations of cetaceans behaving in a lethargic fashion or having labored breathing has been documented in more than one species, including in gray whales after the EVOS, in which large numbers of individuals were subsequently found dead." EIS at IV-158.

"The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, reduced immune function, reduced reproduction or longer dependency periods) effects on large cetaceans from a large oil spill essentially is unknown. There are no data on large cetaceans adequate to evaluate the probability of sublethal effects. EIS at IV-160.

"The effects of a large oil spill and subsequent exposure of whales to fresh crude oil are uncertain, speculative, and controversial." EIS at IV-161.

2. Bowhead Whale

"There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur; where leases will be let; where a spill could occur; where production platforms and pipelines may be based; etc. More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially

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repeated exposure to loud noise, on baleen whales. There is uncertainty and controversy regarding the potential effects of oil spills on large cetaceans. There are very few, if any, data available about potential effects of either noise or oil spills on cetacean calves. Lastly, and importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales. Thus, it is difficult to predict exposure in some parts of the area where the action could occur and to understand fully the potential effects of any exposure." EIS at IV-82.

a. Effects of seismic and other noise on bowhead whale

"Uncertainty exists about the potential effects of seismic surveys on bowhead whales (especially on calf survival and growth and female reproduction) in the Chukchi Sea due to a lack of current data about their use of the Proposed Action area during periods when seismic surveys could be occurring. What is known, however, is that the observed response of bowhead whales to seismic survey noise varies among studies. Some of the variability appears to be context specific (i.e. feeding versus migrating whales) and also may be related to the whales' reproductive status and/or sex or age." EIS at II-35.

"Bowheads respond to drilling noise at different distances depending on the types of platform from which the drilling is occurring. Data indicate that many whales can be expected to avoid an active drillship at 10- 20 km or possibly more." EIS at II-36. *See also id.* at IV-194 (similar).

"The long-term response of bowheads to production facilities located at the southern end of the migration corridor is unknown." EIS at II-36.

"The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown." EIS at IV-194 (internal references omitted).

"There are multiple sources of uncertainty in our analyses. These include, but are not limited to uncertainty about the action: where seismic surveys will occur; how many surveys will occur; how much noise will be produced purposely by the firing of airguns; what the exact shape of related ancillary activities, such as support vessel type and activity will be; where exploration drilling could occur. . . ." EIS at IV-82.

"More important, there is acknowledged (NRC, 2003, 2005; minutes from meetings of the Marine Mammal Commission Sound Advisory Panel, 2004, 2005 from their web site) scientific uncertainty about the potential effects of noise, especially repeated exposure to loud noise, on baleen whales." EIS at IV-82.

"Data are not sufficient to determine sex, age, or reproductive factors that may be involved in [bowhead] response to vessels. We are not aware of data that would allow us to determine whether females with calves tend to show avoidance and scattering at a greater, lesser, or at the same distances as other segments of the population." EIS at IV-109.

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"The encounter rate of bowhead whales with vessels associated with exploration would be determined by what areas were being explored. Data are insufficient for us to accurately predict the average geographic zone of activity by the support vessels and thus, to predict the additional area that could be affected by the vessels." EIS at IV-100.

"Data on reactions of bowheads to helicopters are limited." EIS IV-100.

"While it is clear that seismic activity may overlap with bowhead use of the Chukchi Sea during fall migration, it is highly uncertain about the likely extent of overlap between seismic activity and bowhead whales in the summer." EIS at IV-101.

"During fall migration, available, but dated, data indicate that overlap is likely to be greatest in the main migratory pathways, one heading nearly directly to the Bering Strait, and the other heading west from Barrow towards Wrangell Island." EIS at IV-101—102.

"It is clear that if 2D/3D seismic surveys impacted areas of the spring lead and polynya system during the spring migration, impacts could potentially be biologically significant. We note that the general location of the spring lead system in the Chukchi Sea (and Beaufort Sea) is based on relatively limited survey data and is not well defined." EIS at IV-102.

"The second situation for possibly larger than typical impacts exists in the Chukchi Sea in the autumn (e.g., late September on) as whales migrate both towards the Asian coast and toward the Bering Strait. Insufficient data exist to determine the current migration paths or the numbers of whales that might be deflected from those paths. Data are also not available to determine how intensively bowheads feed during the autumn migration in the Chukchi Sea or whether large aggregations exist in certain places due to prey resources." EIS at IV-103.

"The factors associated with the variability [of bowhead responses to drills and other noise] are not fully identified or understood." EIS IV-105.

"There are few data on the noise [imposed on, e.g., bowheads] from conventional drilling platforms." EIS at IV-105.

"Most observations of bowheads tolerating noise from stationary operations are based on opportunistic sightings of whales near ongoing oil industry operations, and it is not known whether more whales would have been present in the absence of those operations. Because other cetaceans seem to habituate somewhat to continuous or repeated noise exposure when the noise is not associated with a harmful event, this suggests that bowheads will habituate to certain noises that they learn are nonthreatening. Additionally, it is not known what components of the population were observed around the drillship (adult or juvenile males, adult females, etc.)." EIS IV-105.

"The response of bowhead whales to construction in high use areas is unknown and is expected to vary with the site and the type of facility being constructed. Similarly, the long-term response of bowheads to production facilities other than gravel islands located at the southern end of the migration corridor is unknown." EIS at IV-123.

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"The response of bowhead whales to construction in high-use areas is unknown and is expected to vary with the site and the type of facility being constructed. EIS at IV-194.

"Noise associated with ships or other boats potentially could cause bowheads to alter their movement patterns or make other changes in habitat use. Clapham and Brownell (1999) summarized that "...effects of ship noise on whale behavior and ultimately on reproductive success are largely unknown." EIS at V-23.

"[R]ecent monitoring studies indicated that most fall migrating whales avoid an area with a radius about 20-30 km around a seismic vessel operating in nearshore waters; however, there are no data that indicate that such avoidance is long-lasting after cessation of the activity." EIS at V-25.

b. Effects of oil spill on bowhead whale

"There is uncertainty about the effects on bowheads (or any large cetacean) from the event of a large oil spill." EIS at II-36.

"The potential effects to bowheads of exposure to [polycyclic aromatic hydrocarbons, PACs] through their food are unknown. Because of their extreme longevity, bowheads are vulnerable to incremental long-term accumulation of pollutants." EIS at IV-103. *See also id.* at IV-119 (same).

"In the Biological Opinion for Federal oil and gas leasing and exploration by the MMS within the Alaskan Beaufort Sea and its effects on the endangered bowhead whale, the NMFS (2001:51) stated that: 'It is difficult to accurately predict the effects of oil on bowhead whales (or any cetacean) because of a lack of data on the metabolism of this species and because of inconclusive results of examinations of baleen whales found dead after major oil releases.'" EIS at IV-103.

"There is great uncertainty about the potential effects of ingestion of spilled oil on bowheads, especially on bowhead calves. Decreased food assimilation could be particularly important in very young animals, those that seasonally feed, and those that need to put on high levels of fat to survive their environment." EIS at IV-118.

"It is not known if bowheads would leave a feeding area where prey was abundant following a spill." EIS at IV-118.

"The factors associated with the presence of [large aggregations of bowhead whales] are not yet clear. It is not known if they would leave the area heavily contaminated with crude oil." EIS at IV-121.

"Primarily because of the uniqueness of the bowhead and its apparently obligate use of spring lead and polynyas as its migratory path between wintering and summering grounds, MMS is uncertain of the potential severity of impact should a large oil spill occur within such a system, especially if spring migration were underway and hundreds of females were calving in or near those leads." EIS at IV-121.

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"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"In conclusion, there is uncertainty about effects on bowheads (or any large cetacean) in the event of a large oil spill. There are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area. If a large amount of fresh oil contacted a significant portion of such an aggregation, effects potentially could be greater than typically would be assumed and we cannot rule out population-level effects if a large number of females and newborn or very young calves [so this would be in spring] were contacted by a very large amount of fresh crude oil." EIS at IV-125.

"Variability in the distribution of bowhead whales in the Beaufort Sea over time and among years, and lack of recent data on bowhead seasonal distribution and abundance in the Chukchi Sea makes attempts to quantitatively model the numbers of whales that might be contacted by oil problematic." EIS at IV-121.

"It is unknown what effects an oil spill would have on bowhead whales, but it is likely that some whales would experience temporary, nonlethal effects from the oiling of skin, inhaling hydrocarbon vapors, ingesting oil contaminated prey, fouling of their baleen, losing their food source, and temporary displacement from some feeding areas." EIS at IV-216-217.

"Limited monitoring data prevent effective assessment of cumulative subsistence-resource damage; resource displacement; changes in hunter access to resources; increased competition; contamination levels in subsistence resources; harvest reductions; or increased effort, risk, and cost to hunters. Limited data also limit our assessment of the effectiveness of mitigation measures." EIS at V-46.

c. Effects of past activity on bowhead whale

"Available data . . . are inadequate to fully address issues about effects of past oil and gas activity specifically in the Chukchi Sea on bowhead behavior." EIS at V-25.

Also, "we cannot adequately assess potential effects on patterns or durations of bowhead habitat use. Because of the inadequacy of the data on activities, and because of the limitations inherent in studying large baleen whales, MMS was not able to assess whether there were any adverse health effects to individuals during the period of relatively intensive seismic survey activity in the 1980's." EIS at V-25.

"However, data are inadequate to fully evaluate potential impacts on whales during this period, including the duration of habitat use effects or numbers and types of individuals that did not use high-use areas because of the activities." EIS at V-27.

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4. *Humpback, Fin, and Other Baleen Whales*

a. Effects of seismic and other noise on humpback, fin, and/or other baleen whales

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

"No studies are available specific to the effects of seismic-survey noise on minke whales, but the potential for impacts would be considered within the range of other baleen whales. Also, no known long-term impacts have been documented on gray and minke whale behavior as a result of seismic activity." EIS at IV-151.

"Long-term impacts of OCS seismic-survey noise on the hearing abilities of individual marine mammals are unknown, and information about the hearing capabilities of large baleen whales is mostly lacking." EIS at IV-89.

b. Effects of oil spills on humpback, fin, and/or other baleen whales

"[I]t is difficult to predict the impact of a large spill on either humpback whales or especially on fin whales. Based on literature on other mammals indicating severe adverse effects of inhalation of the toxic aromatic components of fresh oil, mortality of cetaceans could occur if they surfaced in large quantities of fresh oil. However, if such mortality occurred, it would be not be consistent with many, perhaps most, published findings of expected impacts of oil on cetaceans. The potential for there to be long-term sublethal (for example, reduced body condition, poorer health, or longer dependency periods), or lethal effects from large oil spill on cetaceans essentially is unknown. There are no data on cetaceans adequate to evaluate the probability of such effects." EIS at IV-122.

"There are no data available on which to evaluate the potential effect of a large or very large spill on baleen whale calves, on females who are very near term or who have just given birth, or on females accompanied by calves of any age." EIS at IV-161.

c. Cumulative impacts on humpback, fin, and/or other baleen whales

"There are no records of humpbacks killed or injured in the fisheries in which fishers self report (Angliss and Lodge, 2002), but the reliability of such data is unknown." EIS at V-29.

"The impacts of pollution and habitat degradation [on humpback whales] due to coastal development are not known." EIS at V-30.

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d. Cumulative effects on bowhead whale

"[D]ata on other potential perturbations (e.g., past seismic surveys and oil spills) are not sufficient to clearly know the level of effects [on bowheads]." EIS at V-20.

"Whether there are long-lasting behavioral effects from [subsistence] activity are unknown, but overall habitat use appears to be relatively unaffected." EIS at V-20.

"There are not sufficient data about past human activities, including, but not limited to, past offshore oil and gas related seismic surveys, or ice-management activities, to address whether there are any long-term impacts on [bowhead] behavior from such activities in either evaluation area." EIS at V-20.

"There are insufficient data to make reliable predictions of the effects of Arctic climate change on bowhead whales." EIS at V-22 (quoting Angliss and Lodge (2002:174)).

"If climate changes occur, it is likely that shipping would increase throughout the range of the bowhead, especially in the southern portions of the Arctic Ocean. If commercial fisheries were to expand, bowhead whale death and/or injury due to interactions with fishing gear, possibly injury and/or death due to incidental take in commercial fisheries, and temporary effects on behavior potentially could occur. There are, however, no data that would permit a quantitative prediction of the aforementioned possible effects." EIS at V-22.

"Data on other activities, such as hunting activity, barge traffic, and shipping noise are incomplete. Thus, while it is clear there have been multiple noise and disturbance sources in the Beaufort Sea over the past 30 years, because of the incompleteness of data, even for the 1990's, for many types of activities, we cannot evaluate the cumulative effects on bowhead whales resulting from multiple noise and disturbance sources (e.g., 2D seismic in State and Federal waters, drilling, ice management, high-resolution acoustic surveys, vessel traffic, construction, geotechnical borehole drilling, aircraft surveys, and hunting). Because data also are incomplete for the Chukchi Sea, we reach the same general conclusions." EIS at V-26.

3. *Beluga Whale*

"A large oil spill could have significant impacts to beluga prey species, including anadromous and coastal spawning species such as salmon (Sec. IV.C.1.d). If a significant impact to anadromous and coastal spawning species occurred, the effects on belugas would be detrimental, but the magnitude unknown." EIS at IV-161.

"Given the greater potential for anthropogenic-noise impacts on baleen whales, more research has been done to focus on potential effects on baleen whales than with toothed whales (although data is still considered limited)." EIS at IV-151.

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C. *Other Marine Mammals*

1. *Seals*

"It is uncertain how seismic surveys potentially might impact seal-food resources in the immediate vicinity of the survey." EIS at IV-147.

In the context of seals: "Although it is unlikely that airgun operations during most seismic surveys would cause [permanent threshold shift] in marine mammals, caution is warranted given the limited knowledge about noise-induced hearing damage in marine mammals." EIS at IV-147.

"Little information is known about oil-spill effects on seals although any large oil spill in nearshore marine or coastal riverine environments could cause injury or death to these sea mammals, potentially cause them to move off of their normal course, and make them unavailable for subsistence harvest." EIS at IV-217 (internal references omitted).

2. *Walrus*

a. Effects of seismic

There is "no data available to evaluate the potential response of walrus to seismic operations." EIS at IV-148.

"Quantitative research on the sensitivity of walrus to noise has been limited because no audiograms (a test to determine the range of frequencies and minimum hearing threshold) have been done on walrus." EIS IV-148.

"Although the hearing sensitivity of walrus is poorly known, source levels are thought to be high enough to cause temporary hearing loss in other species of pinnipeds." EIS at IV-148.

"Seismic operations are expected to create significantly more noise than general vessel and icebreaker traffic; however, there are no data available to evaluate the potential response of walrus to seismic operations." EIS IV-148.

3. *Polar Bears*

a. Effects from oil spills

"With the limited background information available regarding large oil spills in the offshore arctic environment, the outcome of a large oil spill is uncertain." EIS at IV-165.

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b. Cumulative effects

"Quantitative data are lacking that specifically addresses the potential cumulative impacts of development on polar bears and the effects of disturbance related to human activities on polar bear habitat use, as well as recruitment and survival (Perham, 2005). There also is a high degree of uncertainty regarding the spatial scope of potential Industry activities on the Alaskan OCS." EIS at V-36. *See also id.* at V-52 (same).

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"It is unknown if exposed adult[birds] could become permanently sterilized [due to exposure to oil]." EIS at IV-133.

B. Impacts to Threatened Spectacled and Steller's Eiders⁴

"The behavioral response of eiders to aircraft overflights is unknown; some spectacled eiders nest and rear broods near the Deadhorse airport indicating that some individuals tolerate frequent aircraft noise. Individual tolerances are expected to vary, however, and the intensity of disturbance associated with the proposed action would, in most cases, be less than that experienced by birds at the Deadhorse airport. Some birds may be displaced, with unknown physiological and reproductive consequences." BE at 38 (emphases added).

"Collision-related mortality to eiders on the North Slope is not known and is difficult to estimate ..." BE at 44.

Ledyard Bay Critical Habitat Areas: "The loss of seafloor habitats due to exploration or delineation drilling cannot be quantified at this time, but could be in important staging or molt migration areas. The importance of these areas relative to the timing of molt, survival during the molting period, and condition after molting is unknown, however, the availability and quality of key resources in those areas during the prolonged migration period ultimately may influence the survival of the spectacled eiders (Petersen et al. 1999)." BE at 47.

"The disturbance radius from the drilling operation is unknown. Temporal and spatial use patterns for eiders within the Critical Habitat Area are also largely unknown." BE Addendum at 1.

C. Impacts to Kittlitz's Murrelets⁵

"Clearly, there is cause for concern regarding the long-term survival of the [Kittlitz's Murrelet] and the potential negative impacts of offshore oil and gas development; however, management decisions are difficult given the lack of available information." BE at 36-37.

"Though impacts of oil spills [on Kittlitz's murrelets] have been documented (van Vliet and McAllister 1994, Carter and Kuletz 1995), little is known of potential impacts of disturbance on courtship behavior, foraging ecology and feeding, or energetics (Day et al. 1999)." BE at 37.

⁴ See note 1.

⁵ See note 1.

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III. MARINE AND COASTAL BIRDS

A. Impacts Generally

"Several areas historically documented to be important to marine and coastal birds in Sale 193 area, as well as the entire proposed lease sale area, lack site-specific data on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult. Overall, several species or species-groups have a high probability of experiencing substantial negative impacts. The risk that several regional bird populations could experience significant adverse impacts is high." EIS at II-37.

"The current distribution and abundance of [bird] predators along the Chukchi Sea coast are unknown." EIS at IV-132.

"Marine and coastal birds could be exposed to a variety of potential negative effects during seismic surveys, exploration drilling, and production including disturbances, collisions, habitat loss, petroleum exposure, and exposure to toxic contamination. The greatest potential for substantial adverse impacts typically would arise from collisions, aircraft disturbance, and large and chronic low-volume spills in important coastal bird habitats. These areas are Kasegaluk Lagoon, Ledyard Bay, Peard Bay, barrier islands, the spring open-water lead system, and the seabird-nesting colonies at Cape Lisburne and Cape Thompson. Despite the importance of these areas, as well as the entire Chukchi Sea within the proposed lease-sale area, little recent site-specific data are available on habitat-use patterns, routes, and timing to assess impacts. For many species, the most recent data are between 15 and 30 years old, making accurate analysis difficult. Because of this long data gap, it is unknown if population abundance or distribution of many species have changed." EIS at IV-145.

1. Noise impacts on marine and coastal birds

"Seismic airgun pulses have the potential to physically harm or kill diving birds. The threshold for physiological damage, namely to the auditory system, for marine birds is unknown." EIS at IV-127.

"Few studies have assessed the effects of seismic surveys on marine birds and waterfowl." EIS at IV-127.

2. Oil impacts on marine and coastal birds

"There are several areas historically documented to be important to marine and coastal birds in the proposed lease sale area. These areas, as well as the entire proposed lease sale area, lack site-specific data on habitat use patterns, routes and timing to assess impacts. For many species, the most recent data is between 15 and 30 years old, making accurate analysis difficult." EIS IV-126.

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"Additional information on the response of diving birds to approaching seismic survey vessels is essential to verify assumptions that there is a low potential for seabirds, including Kittlitz's murrelets, to be harmed by airgun noises." BE at 41.

D. Impacts on Waterfowl1. Impacts on Yellow-Billed Loons

"Yellow-billed loons in the Chukchi Sea are at particular risk [from environmental perturbations such as disturbance, habitat alterations, and oil spills] due to their low numbers and low reproductive rate. The species is little studied and basic biological information (such as the seasonal distribution of immature and non-breeding yellow-billed loons) is unknown. Additional research could improve our understanding of the vulnerabilities of the yellow-billed and other loons using nearshore areas of the Chukchi Sea and western Beaufort Sea." EIS at IV-140-41.

2. Impacts on Common Eiders

"The number of [common eiders] that could be affected [by oil spill] at sea during spring or fall migration is unknown." EIS at IV-142.

E. Impacts on Shorebirds

"Dunlins are another prominent species in Kasegaluk Lagoon and Peard Bay in late summer and fall. As with other species of shorebirds and waterfowl, a spill during periods of peak abundance could impact large numbers of dunlins. Less is known about the numbers, timing, and patterns of habitat use of Kasegaluk Lagoon and Peard Bay by bar-tailed godwits but, given their recent population declines, effects of an oil spill could be particularly important." EIS at IV-144.

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DRAFT DRAFT DRAFT
FEBRUARY 2010Attachment 3
Major Problems with Oil Spill Models

The Lease Sale 193 (Chukchi) and 2003 Multi-Sale (Beaufort 186, 195, 202) environmental impacts statements use the same primitive model to estimate how spilled oil might travel in the marine environment. This model, which was developed in 1982, forms the basis for the evaluation of potential impacts from a spill. Because the environmental assessments for the exploration drilling proposed for the Beaufort and Chukchi Seas in 2010 assume that no large spill will occur, they do not contain any additional modeling of, or evaluation of potential effects from, a spill. The model used in the environmental impact statements suffers from substantial deficiencies:

- The model assumes that spilled oil is a point—it does not account for spreading of spilled oil, for the possibility that different parcels of a spreading oil slick may travel along different trajectories, or that these parcels may re-converge at locations distant from the spill origin, all of which are important aspects of the behavior of actual oil spills.
- Much of the environmental data input to the model is old—particularly current and wind information, which is from 1979-1996. Much has changed in the Arctic since then, and better information should be available.
- The model cannot account for the presence of sea ice. It assumes that shorefast ice exists for part of the year and that the ice “masks” the shore, which means that no oil could reach the shore.
- The model divides the leased area into a series of quadrants. Within each quadrant, it predicts that a spill could occur from a number of locations. It treats a spill from each location as equally likely and then provides an estimate of likelihood that a spill from each quadrant would reach land. This method biases the calculation in two ways. Some of the locations are further from land than others, so the model understates the likelihood of spilled oil from one of the closer locations reaching shore. Also, a spill is not equally likely from each location—Shell only wants to drill at some of them.
- The SINTEF model used to evaluate weathering effects on spilled oil is independent of the model used to estimate trajectories, making it impossible to evaluate effects related to, for example, the increasing propensity of oil to sink as it weathers.
- The model does not consider interactions with suspended particulate matter, which is crucial for determining the propensity of spilled oil to sink, thereby affecting the benthic community which is especially important in Arctic coastal marine ecosystems.
- More sophisticated and appropriate models that address the defects listed above have been available for over a decade.

Hello. My name is Lois Epstein and I am the Arctic Program Director for The Wilderness Society or TWS. I am a licensed engineer in Alaska and I have spent over 20 years working on oil and gas technical and policy issues as a consultant and as an employee of non-profit organizations. I've served on federal advisory committees for U.S. DOT on pipeline safety and for U.S. EPA on petroleum refining, and I was a technical advisor on the report to the President in May 2010 which contained recommendations on increasing offshore drilling safety. I am not opposed to oil and gas production in Alaska -- my role at TWS is to ensure that oil and gas drilling is done well and in appropriate locations.

In September I served on a BOEM panel in Houston on safety. My message was that “business as usual” is unacceptable to the public and that significant regulatory, inspection and enforcement changes are needed, as well as transparent performance reporting by industry and government. With respect to the Arctic, I noted that one key safety concern is related to human factors, a major cause of accidents. Because of cold and darkness in the Arctic, human factors likely would be a greater concern than elsewhere. Moreover, frontier and pristine areas always require extra precautions and safety factors. You've heard from others today about response limitations in the Arctic including limited biodegradation capabilities, the difficulties of cleanup in broken ice, and how darkness, adverse weather, and lack of infrastructure would impede cleanup so I won't go into detail on those concerns.

TWS' position is that BOEM needs to take the time needed to make scientifically-justified decisions before allowing drilling in the Chukchi. This includes reassessing which scientific information in Appendix A of the Draft SEIS is obtainable at a cost that is not exorbitant, rather than BOEM dismissing the need to gather such information. In effect, BOEM states in the draft SEIS that it has decided to allow drilling regardless of the impacts. The public needs to know those impacts in as specific detail as possible for rational decision-making.

If there is any doubt about blowouts and other offshore problems in the Arctic, consider the following events which also occurred in Alaska's shallow offshore areas in Cook Inlet:

1985. Gas blowout at Grayling offshore platform which shut down production.

1987-88. Gas blowout at Steelhead offshore platform occurred while drilling an oil production well in December 1987. Fire burned for one week. While drilling the relief well, another blowout occurred in June 1988. The relief well was completed in August 1988.

1989. A frozen valve on Amoco's Anna offshore platform caused a spill of over 20,000 gallons of crude. Cleanup was not attempted due to 80-90% moving ice floes in Cook Inlet.

As some of you also may have done, I woke up at 5 am yesterday and today to watch the Oil Spill Commission's two days of hearings in DC on the causes of the BP *Deepwater Horizon* tragedy. BOEM Director Brownich today noted the extreme sensitivity of the Arctic environment and its marine resources and their importance to subsistence, as well as the region's spill cleanup challenges. On a technical level, the two days of hearings made clear how well-financed drilling companies nevertheless could:

1. Misinterpret data from a key well integrity test,
2. Decide not to utilize potentially critical well components known as centralizers because they would take too long to arrive, a delivery situation that would be much worse in the Arctic, and
3. Not take actions that would have mitigated much of the tragedy, e.g., using the platform's diverter system.

What these hearings demonstrate is that no matter how good the regulatory oversight – and everyone acknowledges that BOEM needs regulatory improvements – there will be infrequent but highly tragic spill events. This information, combined with a clear need for collection and analysis of scientific data on the Arctic's natural resources, demonstrate that BOEM is not ready at this time to proceed with offshore drilling in the Chukchi. BOEM should not rush through this EIS process like a student rushing to complete a term paper...

Corporations and Industry Groups

Alaska Interstate Const., LLC Comment

Alaska Interstate Const., LLC Comment

Routhier, Michael

From: Steve Percy [Steve.Percy@aiclc.com]
Sent: Monday, November 29, 2010 4:06 PM
To: BOEMRE AK Public Comments
Cc: Sophie Minich
Subject: comments regarding Lease sale 193
Attachments: Lease Sale 193 11-29-10 comments.docx

Please find attached AIC's position on this issue.

Steve Percy
 President Alaska Interstate Const. LLC
 301 W. Northern Lights Suite 600
 Anchorage, AK. 99503
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1/11/2011

Lease Sale 193 - Comments of 11-29-10

The hard fact is that oil will be the number one energy source in the world for some time into the future. The time line on any "alternative" energy source replacing oil is unforeseeable at the present. Responsible energy development, on many levels, has the very shallow OCS of the Chukchi and Beaufort Seas topping the list of best places to develop America's oil resources.

Points of view which have encouraged the existing drilling moratorium tend to place all OCS drilling in the same category. However, the differences between the deepwater drilling conditions encountered in the Gulf of Mexico and the very shallow water drilling in the Chukchi Sea are critical in well head working pressures, well design and well maintenance; all placing the shallow Chukchi Sea drilling in a very positive light.

The environmentally concerned citizen should rather see the oil resources developed under the stringent scrutiny you find on the North Slope of Alaska than in a third world country that has few, if any, environmental policies. The Beaufort and Chukchi Seas are perhaps the most studied offshore fields in the world. The worlds' highest safety and environmental standards; an industry commitment for unprecedented spill prevention and spill response provisions; along with an extremely high bar for obtaining permits to operate all combine to provide a high level of confidence in the oil industry in Alaska.

Finally, the existing TAP is 70% empty now. This oil reservoir could refill the pipeline and revitalize the search for additional energy sources in the area. The development of Lease Sale 193 would not only bolster the US domestic energy supply but it would provide an annual average of 35,000 good paying jobs over the next 50 years in Alaska. Plus add thousands of new high-paying jobs in the energy industry's collateral support network throughout all 50 states.

The Lease Sale 193 should be affirmed as held in 2008. Additional costs for obtaining information are exorbitant and unnecessary. Additional information will likely be found to be not essential or relevant to a decision. The nation needs the domestic energy for long term security and Alaska needs the resource development for its' economic future. We need to build strength with our policies not weakness. Let's move forward with a strong energy plan that includes the responsible development of the Chukchi and Beaufort OCS.

November 30, 2010

Regional Director, Alaska OCS Bureau
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

Attn: Chukchi Sea Draft SEIS

Dear Sirs,

We encourage you to reaffirm Lease Sale 193. We are confident that the SEIS is adequate and the oil and gas production from Sale 193 will be done pursuant to adequate environmental safeguards.

Alaska and our nation need the employment and economic benefit that this Lease Sale will provide. Further, our nation will benefit from the oil and gas that is produced.

Sincerely,

Owen Graham
 Executive Director
 Alaska Forest Association
 Suite 200
 111 Stedman Street
 Ketchikan, Alaska 99901



Alaska Miners Association, Inc. Comment
ALASKA MINERS ASSOCIATION, INC.
 3300 Arctic Blvd., #100, Anchorage, Alaska 99503 • (907) 563-9229 • FAX: (907) 563-9220 • www.alaskaminers.org

November 15, 2010

Regional Director, Alaska OCS BOEMREAKPublicComments@boemre.gov
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820

RE: Chukchi Sea Draft SEIS

Dear Sir,

We are writing to urge that Lease Sale 193 go forward as it was held in 2008. Alaska and America need the oil and gas that is in this area.

The Alaska Miners Association is a non-profit membership organization established in 1939 to represent the mining industry in Alaska. The AMA is composed of more than 1200 individual prospectors, geologists and engineers, vendors, suction dredge miners, small family mines, junior mining companies, and major mining companies. Our members look for and produce gold, silver, platinum, diamonds, lead, zinc, copper, coal, limestone, sand and gravel, crushed stone, armor rock, and other materials. Our members depend on a stable source of petroleum products to operate their businesses and provide the minerals needed for our society.

The potential environmental impacts and economic benefits of developing oil and gas in this area have been thoroughly evaluated and show that this is in the best interest of the United States. The Supplemental Environmental Impact Statement provides comprehensive data, analysis and support to make a decision affirming Lease Sale 193. **Given the level of analysis already completed and the needs of our country for domestic sources of oil and gas, to delay this development in any way by some form of indirect moratorium or further delay must not be allowed.**

The Bureau of Ocean Energy Management, Regulation and Enforcement needs to find ways to encourage investments in finding domestic sources of oil and gas. Further delays will do just the opposite. With an estimated 29 billion barrels of oil and 209 trillion cubic feet of natural gas, the Chukchi Sea and Lease Sale 193 can be a major factor to improve our nation's long-term energy security. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.

Oil and gas development in Alaska would be done under the world's highest safety and environmental standards. All activity will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.

Alaska Miners Association, Inc. Comment

Oil and gas development proposed in Arctic waters is much different than deepwater exploration in the Gulf of Mexico. The pressures encountered in deepwater drilling are many times greater than in Alaska where wells would be in very shallow water.

There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled more than two decades ago and utilized older technology than what would be used now.

A University of Alaska study estimates that new OCS development in Alaska would provide an average of 35,000 jobs in Alaska. It would also create thousands of new high-paying jobs throughout all 50 states and it would decrease our dependence on foreign sources of oil and gas.

Given our current extreme dependence on foreign sources of energy, the U.S. has a moral obligation to develop the resources in the Beaufort and Chukchi seas. **We urge that you move forward with Lease Sale 193 immediately.**

Sincerely,



Steven C. Borell, P.E.
Executive Director

- Cc: Senator Lisa Murkowski
- Senator Mark Begich
- Congressman Don Young
- Governor Sean Parnell

Alaska Oil and Gas Association Comment

Alaska Oil and Gas Association



121 W. Fireweed Lane, Suite 207
Anchorage, Alaska 99503-2035
Phone: (907)272-1481 Fax: (907)279-8114
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Kate Williams, Regulatory Affairs Representative

November 30, 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Attn: Chukchi Sea Draft SEIS

Dear Regional Director:

The Alaska Oil and Gas Association ("AOGA") appreciates this opportunity to submit comments on the Draft Supplemental Environmental Impact Statement ("SEIS") for Chukchi Sea Lease Sale 193. AOGA is a private, nonprofit trade association whose member companies account for the majority of oil and gas exploration, development, production, transportation, refining and marketing activities in Alaska.

AOGA endorses the comments on the SEIS for Lease Sale 193 being submitted by the American Petroleum Institute ("API") and the National Ocean Industries Association ("NOIA") and encourages the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEM") to consider and incorporate the suggestions contained therein. AOGA offers the following additional comments on the SEIS.

The purpose of the SEIS is for the BOEM to provide new National Environmental Policy Act ("NEPA") analysis as directed by the U.S. District Court for Alaska in a July 2010 order. This order instructed BOEM to address three specific concerns: (1) the environmental impact of natural gas development; (2) whether missing information identified in the original EIS was essential or relevant under the federal regulations; and (3) whether the cost of obtaining the missing information was exorbitant, or the means of obtaining it unknown. The SEIS addresses those concerns, concludes that the missing information was not essential and recommends that Lease Sale 193 be affirmed as held. AOGA believes the Secretary should accept the conclusions of the SEIS and expeditiously affirm the sale so exploration and development in the Chukchi Sea Outer Continental Shelf ("OCS") is not delayed any longer.

Alaska Oil and Gas Association Comment

November 30, 2010

The SEIS considers the most viable natural gas development and production scenario for Chukchi leases – including use and potential expansion of existing (due to oil development and production) infrastructure and an overland gas pipeline transportation system – in the context of the alternatives analyzed (and evaluated to the satisfaction of the Court) in the Final EIS for Lease Sale 193. On this point, the SEIS correctly assumes that first commercial gas production would only follow the oil exploration, development and production activities already analyzed in the Final EIS. Furthermore, for each resource category – including water quality, air quality, fish, essential fish habitat, whales, polar bears, other marine mammals, terrestrial mammals, vegetation and habitat, subsistence harvest patterns and sociocultural systems – the SEIS determines that natural gas development and production would have no significant adverse impacts. For resource categories such as marine and coastal birds and archaeological resources, potential impacts would be avoidable or reduced through avoidance and mitigation and compliance with existing construction protocols and laws.

Also important is the fact that what is at issue is a lease sale. The OCS Lands Act establishes a four-stage process for planning, leasing, exploration and production of oil and gas resources in Federal waters. Under this process, an OCS lease authorizes a lessee to engage only in "ancillary activities" that do not harm the environment pending further review and approvals. BOEM approval is required prior to any exploration, development or production activities within a lease block. Lessees seeking to engage in such actions must submit for BOEM review an exploration or development and production plan, as appropriate. BOEM is then required under NEPA to prepare an Environmental Assessment ("EA") and/or an EIS. Proposed plans are evaluated for compliance with applicable regulations, lease stipulations and other requirements, including the adequacy of the related oil-spill response plan. Prior to conducting any drilling operations, the lessee is also required to submit and obtain approval for an Application for Permit to Drill ("APD").

AOGA agrees with BOEM's conclusion that new information regarding the Deepwater Horizon incident is not relevant to the analysis of natural gas development and production in the Chukchi Sea OCS, and that analysis of such an oil spill is not within the scope of the District Court's order. Since the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring is unlikely. In addition, even if the Court's order required reconsideration of potential impacts related to production of oil, the information available on the Deepwater Horizon spill would not require any analysis in the SEIS because of the differences between the Gulf of Mexico and the Chukchi Sea cited in the SEIS, including the fact that the Chukchi Sea Planning Area is predominantly shallow water.

Alaska Oil and Gas Association Comment

November 30, 2010

Sale 193 is the most successful oil and gas lease sale in Alaska's history (and at the time, in U.S. history). BOEM received approximately \$2.7 billion in high bids and issued 487 leases. The time required to get from lease sale to first production is estimated to be 20 years, yet to date, not even one exploratory well associated with Sale 193 has been drilled.

Development of Alaska's OCS is vital not only to Alaska's economy, but the nation's energy independence. In the past, Alaska's oil resources accounted for 20 percent of the nation's domestic production (1980-2000). Today, that number has declined to 9 percent. According to conservative Department of Interior ("DOI") estimates, Alaska's OCS holds 25 billion barrels of oil and 122 trillion cubic feet of natural gas – one-third of the nation's technically recoverable OCS reserves. By comparison, the U.S. has 22 billion barrels of proved oil reserves, annual U.S. production of oil is 1.6 billion barrels and total production to date from the North Slope is about 16 billion barrels of oil.

With global demand for oil and natural gas expected to increase 50 percent by 2030, it is critical that energy companies have access to domestic hydrocarbons. Today, about 65 percent of the nation's oil supply and nearly 20 percent of its natural gas supply is imported. The current trend threatens to undermine our economy and national security. Clearly, Alaska's OCS has the potential to make a significant contribution to the domestic supply of oil and gas and help eliminate this threat.

Access to Alaska's OCS resources is critical to the continued operation of the Trans-Alaska Pipeline System ("TAPS"), which is currently operating at about one-third of its capacity, and could be uneconomic to operate after 2020 without additional throughput. Access is also a key component to the economic feasibility of the proposed natural gas pipeline from the North Slope to the Lower 48. Additionally, OCS oil and gas development would benefit Alaska's economy by providing thousands of high-paying jobs over a long-term period. A study by the University of Alaska's Institute of Social and Economic Research ("ISER") and Northern Economics found that new offshore energy production in Alaska would create an annual average of 35,000 new jobs in the state, with a total payroll of approximately \$72 billion over the 50-year life of the projects. New offshore development in Alaska would also generate thousands of new high-paying jobs throughout the country across a wide-variety of industries. Further, these numbers do not even take into account the royalties and tax revenues directly tied to offshore oil and gas development and production that would flow to the federal government and state and local economies in Alaska.

Exploring for oil and gas offshore in Alaska is not a new concept. A total of 30 wells have been drilled in the Beaufort Sea and five wells drilled in the Chukchi Sea. These wells were drilled over 20 years ago using older technology. Today's technology has resulted in reduced

environmental impacts and footprints for infrastructure for oil and gas development projects. Advancements in 3-D and 4-D seismic technology allow industry to focus their "targets," reducing impacts even more. Moreover, there has never been an oil spill caused by a blowout from offshore exploration and production drilling in state and federal waters off Alaska or the Canadian Arctic.

Finally, Alaska's North Slope and OCS are now perhaps the most studied energy basins in the U.S. In the past decade alone, over 250 scientific studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas. All told, at least \$500 million has been spent on more than 5,000 independent studies since 1973.

AOGA strongly urges the Secretary to affirm Chukchi Sea Lease Sale 193, as recommended by the SEIS. The leases issued under Sale 193 were sold only after an exhaustive environmental analysis, and the specific concerns the District Court raised about the Final EIS for the sale are adequately addressed by the SEIS. Failure to affirm Lease Sale 193 would allow the moratorium on exploration and development of Alaska's OCS to continue, harming Alaska's economy and the nation's energy security, without a corresponding benefit to the environment.

If you have any questions on these comments, please do not hesitate to contact me.

Sincerely,

KATE WILLIAMS
Regulatory Affairs Representative



ALASKA MARITIME AGENCIES
21005 64th Ave W, Suite 201A, Mountlake Terrace WA 98043-2251

Tel: (425) 329-1000
Fax: (425) 329-1008
Tic: 4815854
usoffice@alaskamaritime.com

November 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska's Resources

Dear Mr. Goll:

I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

The draft Supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Thus, it is my hope that the federal government will finally approve the responsible development of the Chukchi's abundant oil and natural gas resources.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, new offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

Daniel J. Blackmore
President



ANCHORAGE Cordova Homer KENAI Kodiak SEWARD WHITTIER DUTCH HARBOR Dillingham Nainok
KETCHIKAN Haines Juneau Sitka Skagway Wrangell VALDEZ

Alaska
Port
Services



"Serving all Southwestern Alaska Ports"
November 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

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It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, new offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

James V. Lee
Vice President of Operations

Alaska Port Services, Inc.
P.O. Box 240254
Anchorage, AK 99524-0254



November 29, 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment – Support Access to Alaska's OCS Oil and Gas Resources

Dear Mr. Goll:

We are writing collectively to support OCS drilling in the Chukchi Sea, specifically in the area of Lease Sale 193 and to encourage BOEMRE to uphold the sale as held in 2008. We encourage BOEMRE to affirm the Draft SEIS and move forward with responsible development of the Chukchi Sea.

The federal government has a tremendous opportunity at hand in terms of economic revitalization, re-forging national security, and job creation for everyday Americans. Today's economic outlook is bleak; with many state governments and our federal government going into debt, it's time for these entities to partner with the private sector to generate revenue and begin the process of freeing ourselves from financial chains that hold us back from success. Resource development is one of the solutions to this problem.

Recently, the University of Alaska conducted a study concluding that new OCS development in Alaska could generate an annual average of 35,000 jobs both directly and indirectly. This translates into a payroll approximately to the tune of \$72 billion over the next 50 years. This helps not only Alaska, but all 50 states; jobs and revenue are not strictly limited to Alaska.

Supporting Alaska supports our entire country, and this issue is proof that we are a key component to building a better America. Oil and gas development in Alaska is one of the steps our country can take to assure national and energy security.

Sincerely,

Benjamin Mohr
Chair, Anchorage Young Republicans

ANCHORAGE YOUNG REPUBLICANS...The Elephants Have Entered the Room.
Alaska Republicans, 1001 West Fireweed, Anchorage, Alaska 99503
Contact us at AnchorageYR@gmail.com

API AND NOIA COMMENTS



November 29, 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500,
Anchorage, Alaska 99503-5820
Attn: Chukchi Sea Draft SEIS (OCS EIS/EA BOEMRE 2010-034)

Comments submitted via e-mail to : BOEMRE-AKPublicComments@boemre.gov

Dear Sir or Madam:

This letter provides the comments of the American Petroleum Institute ("API") and National Ocean Industries Association ("NOIA") (the "Associations") in response to the supplemental environmental impact statement ("SEIS") published by the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE"), October 15, 2010 for Chukchi Sea Lease Sale 193. See 75 Fed. Reg. 63504-05.

API is a national trade association that represents all aspects of America's oil and natural gas industry. API has approximately 400 members, from the largest major oil company to the smallest of independents; from all segments of the industry, including producers, refiners, suppliers, pipeline operators and marine transporters, as well as service and supply companies that support all segments of the industry. NOIA is the only national trade association that represents all companies engaged in the exploration for, and production of, traditional and alternative energy on the nation's Outer Continental Shelf. The NOIA membership comprises more than 270 companies engaged in activities ranging from producing to drilling, engineering to marine and air transport, offshore construction to equipment manufacture and supply, shipyards to communications, and geophysical surveying to diving operations. Many of the members of API and NOIA are engaged in operations or support of operations for the exploration and production of oil and natural gas resources in U.S. Arctic regions. In Alaska, the oil and natural gas industry has proven itself to be a critical partner in the development of the Arctic, and in expanding our knowledge of an Arctic environment that is as fragile as it is remote and challenging.

The SEIS is intended to fulfill the requirement imposed by the U.S. District Court for Alaska to provide new analysis in accordance with the court's July 2010 order remanding the BOEMRE's Chukchi Sea Lease Sale 193 Final EIS (FEIS). This order directed BOEMRE to address three concerns: (1) Analyze

API AND NOIA COMMENTS

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

the environmental impact of natural gas development to supplement what was held to be too limited a focus of the FEIS on crude oil development; (2) determine whether missing information identified by BOEMRE in the FEIS for Chukchi Sea Lease Sale 193 was essential or relevant under 40 CFR 1502.22; and (3) to determine whether the cost of obtaining the missing information was exorbitant, or the means of doing so unknown.

We believe that the SEIS achieves the purposes set forth by the Court. It documents extensive consultation with various federal agencies and the State of Alaska in the course of pursuing environmental review. It examines the most viable natural gas development scenario that could result from development of oil and gas leases offered in Sale 193. It considers the impacts from natural gas development in the context of the oil resource development alternatives that were evaluated to the satisfaction of the Court in the FEIS for Sale 193. It makes the logical assumption that foreseeable natural gas development and production in the Sale 193 area would make use of offshore facilities considered in terms of crude oil development scenarios for Sale 193. The SEIS considers natural gas development scenarios that identify deferral areas along the coastward edge of the Chukchi Planning Area. These deferral areas, were they to be implemented, would affect the type and severity of potential impacts to the offshore and shoreline environments from development based upon the size and location of the deferral areas.

In the course of examining each impact category - including water quality, air quality, fish resources and habitat, threatened, endangered and other marine mammals and marine and coastal birds, wetlands and shoreline vegetation, subsistence resources and impacts to native communities - it finds impacts from natural gas development to be incremental to those from development of crude oil resources, and capable of being addressed by carefully designed mitigation measures. The SEIS properly recognizes that the risk of impacts from oil spills can be controlled by prevention measures that BOEMRE will scrutinize in its review of operational safety and pollution-prevention measures described in a lease operator's permit application, and that the effects of small oil spills are likely to be localized. This does not discount the risk of spills, but it places that risk in an operational and regulatory context appropriate for review under the National Environmental Policy Act ("NEPA"). The SEIS notes the authority of other regulatory agencies over exploration, production and transportation facilities that may be utilized for development of oil and natural gas resources on the OCS. The SEIS also notes the requirements for best available and safest technologies, for technical and safety review and inspections, and for detailed oil spill contingency plans.

In sum, the SEIS supports a determination that impacts to the environment from development of natural gas resources in the Sale 193 area are capable of being prevented by a combination of sound operating practices, compliance with regulations, and appropriate regulatory oversight, and/or capable of being mitigated to insignificance. The SEIS supports a determination that the effects on Arctic communities from potential development of resources on the Sale 193 leases would have direct and indirect consequences on social and institutional organization and cultural practices for those communities but would not tend to displace social systems overall. In recent decades the communities of the Alaskan Arctic have experienced significant social change and can expect to continue to do so, but they are not without capability and leadership to address the challenge of social change for the benefit of the residents and their traditions. Development of the oil and natural gas resources of the region, will not only provide important benefits to the economies of the United States and the State of Alaska, but it can also provide jobs, revenues and benefits to the Arctic communities as well.

API AND NOIA COMMENTS

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

Alaskan oil and gas operations have been a proving ground for technologies that have steadily reduced both the footprint and the impacts of exploration and production activities the industry undertakes. In over 30 years of oil production at Prudhoe Bay and other fields on the Alaska North Slope, producers have significantly advanced technology in drilling, Arctic engineering, waste disposal and environmental management, and have developed better tools to locate the underground structures that contain oil. Together, these advancements and the commitment to environmental performance by the men and women who work on the Slope have greatly reduced the effects of oil development on the wildlife and surface resources surrounding the production operations, and have reduced the footprint that these operations occupy.

Our nation's long term energy security will depend upon diversity of sources of supply. It is important to remember that U.S. domestic production is mostly made up of modest amounts from hundreds of thousands of wells in thousands of oil and gas fields, both onshore and offshore. With the exception of a few very large fields discovered many decades ago, all of our current production comes from fields that can be characterized as only a few weeks or months of supply. Thus, each discovery makes a proportional contribution to supplies over 10, 20, or in some cases, 50 or more years. The U.S. needs a constant supply of new discoveries to replace declining production from existing and end-of-life wells to meet our nation's growing demand for energy. Otherwise production will eventually fall, creating a potential supply/demand imbalance that could have adverse impacts on imports and prices for American businesses, consumers and homeowners.

The resource potential available in Alaskan OCS is first order world class. The oil and natural gas resource potential represented by the Chukchi and Beaufort Seas exceeds the combined resource estimates for the Atlantic and Pacific OCS, holding an estimated 25 billion barrels of oil and 122 trillion cubic feet of natural gas. Exploring for oil and gas offshore Alaska is not new. A total of 30 wells have been drilled in the Beaufort Sea and five wells drilled in the Chukchi Sea. Although some discoveries of oil and natural gas were made, development of these discoveries was not economically viable at that time.

Since 2005, the federal government has held several OCS lease sales in Alaska, and bonus payments to the federal treasury have exceeded \$3 billion for ten-year leases in the Beaufort and Chukchi Sea. Industry's ability to operate safely and in an environmentally responsible manner in the Arctic has been demonstrated for five decades.

This SEIS has found that environmental impacts from natural gas development scenarios are incremental to those from development of crude oil resources in the Sale 193 area. It has found that these impacts are capable of being managed in a manner that will allow environmentally responsible development of those resources, appropriate management and protection of habitat, wildlife, and subsistence resources, and respect for the way of life of the people of the region and their communities. We believe that this balance is achievable in the Arctic, where crude oil and natural gas resources of national and strategic significance are believed to occur, and we believe that the long record of our industry's exploration and production operations in the region supports this assertion.

API and NOIA encourage timely completion of this EIS, to allow holders of oil and gas leases issued on Sale 193 to secure permits and approvals needed to proceed with orderly exploration of those leases, as well as development of those leases should exploration prove successful. Further delays will only serve to jeopardize jobs and the future development of US oil and gas reserves critical to our Nation's energy security.

API AND NOIA COMMENTS

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
November 23, 2010

Thank you for considering these comments. If you need additional information, please contact Richard Ranger at 202.682.8057.

Very truly yours,

Richard L. Ranger

Richard L. Ranger
Senior Policy Advisor, Upstream
API

Jeffrey Vorberger

Jeffrey Vorberger
Director, Government Relations
NOIA



November 22, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503



RE: Support for Chukchi Sea Draft SEIS & Lease Sale 193

Dear Mr. Goll:

On behalf of Consumer Energy Alliance (CEA), I appreciate the opportunity to submit the following comments to the Bureau of Ocean Energy Management, Regulation & Enforcement (BOEMRE) in support of the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

CEA is a non-profit, non-partisan organization committed to working with elected leaders, affected stakeholders and consumers to help create sound energy policy and maintain stable energy prices. We support improved domestic and global energy security and provide information on expanding the use of all energy resources, including oil, natural gas and alternative energy, as well as increasing energy efficiency. CEA has more than 150 affiliated organizations, including energy suppliers and producers, manufacturers, small businesses, and community organizations, as well as a nationwide network of almost 300,000 consumer-advocates.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Therefore, CEA urges the federal government to carefully weigh any environmental considerations against the need to ensure our domestic energy security as well as boost U.S. economic growth and swiftly approve the responsible development of the Chukchi's abundant oil and natural gas resources by moving forward with Lease Sale 193.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, approximately 43,454 jobs are supported by the industry in the state already – jobs that add \$6.1 billion to Alaska's gross state product, or 16.6 percent of its wealth. With the unemployment rate currently up to 7.6 percent, encouraging offshore development will only help boost the state's economy. A study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Furthermore, new offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, CEA urges the BOEMRE to proceed with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as help the federal government pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing. The time has come for the federal government to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

CEA appreciates this opportunity to provide comments to the BOEMRE. If you have any questions, or if CEA can provide additional information, please feel free to contact me directly at 713-337-8800.

Very sincerely yours,

David E. Holt
President

ConocoPhillips Alaska, Inc. Comment



Geoffrey A. Haddad
Alaska Exploration Manager

P.O. Box 100360
Anchorage, AK 99510-0360
Phone 907.265.6354
Fax 907.263.4438

November 30, 2010
Page 2

ConocoPhillips Alaska, Inc. Comment

based upon its expertise and knowledge (see Appendix A at 1-4). We also agree with BOEMRE's findings in Appendix A. As detailed in Appendix A, all of the incomplete and missing information is either not relevant or not essential to a reasoned choice among alternatives in the context of this oil and gas lease sale stage of the multi-step Outer Continental Shelf Lands Act process and in light of other available information.

While BOEMRE is to be genuinely commended for its DSEIS analysis, ConocoPhillips has the following suggestions:

November 30, 2010

VIA EMAIL (BOEMREAKpublicCommen@boemre.gov)

Attn: Chukchi Sea Draft SEIS
Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Comments of ConocoPhillips Company on the Draft Supplemental Environmental Impact Statement for Chukchi Sea Planning Area Oil and Gas Lease Sale 193

Dear Sir or Madam:

This letter provides the comments of ConocoPhillips Company ("ConocoPhillips") in response to the Federal Register notice of the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") requesting public comment on the agency's draft Supplemental Environmental Impact Statement ("DSEIS") concerning Lease Sale 193 in the Chukchi Sea. See 75 Fed. Reg. 63504-63505 (October 15, 2010).¹

ConocoPhillips commends BOEMRE for its thoughtful, timely and complete DSEIS in response to the limited remand ordered in *Native Village of Point Hope v. Salazar*, No. 1:08-cv-00004-RRB (D. Alaska). The Court directed BOEMRE to address three concerns, and it has done so in the DSEIS in a thorough manner. In particular, we commend BOEMRE for addressing in a reasonable and thoughtful manner (i) new information (see, e.g., DSEIS § I.F (but also identified and discussed throughout the DSEIS)), (ii) issues considered but not addressed in detail (see DSEIS § II.C.3) and (iii) the incomplete or unavailable information pursuant to 40 C.F.R. § 1502.22 (DSEIS – Appendix A).

Regarding BOEMRE's comprehensive analysis of incomplete or unavailable information, ConocoPhillips concurs with the reasonable and thorough methodology selected by BOEMRE

¹ The BOEMRE announced at the public meeting in Anchorage that comments would be accepted until November 30, 2010.

1. BOEMRE should more explicitly acknowledge that there is a very substantial body of data and information that exists regarding baseline conditions, and the impacts of oil and gas activity in the Chukchi Sea. The appellants in the appeal leading to the remand ("Appellants") have mischaracterized the record for purposes of litigation and to mold public perception. The Appellants argue that the Chukchi Sea is an area about which almost nothing is known, and into which there is an unprincipled rush to engage in oil and gas resource development. In this context, while it is appropriate for BOEMRE to acknowledge and address information gaps, in the interest of fair and balanced public discourse and agency decision-making, it is also responsible for BOEMRE to expressly acknowledge the full extent of the data that is available.

The DSEIS does not address a number of studies available from many federal agencies, the University of Alaska Coastal Marine Institute, State of Alaska agencies, the North Slope Borough, and the National Science Foundation. Further, in addition to research conducted by SINTEF, the oil and gas industry has conducted or funded ecosystem-based baseline studies on physical oceanography and water quality, biological oceanography such as the benthic and planktonic communities, water chemistry (ocean acidification), coastal and marine birds, marine mammals, fisheries, sensitive biological resources, chemical characterization of sediment and biota, and the acoustic environment. The oil and gas industry has provided funding to local governments and marine mammal commissions to collect additional data, including tagging studies on ice seals, beluga whales, and walrus, and to compile traditional ecological knowledge from hunters and elders on bowhead whales and polar bears. The Chukchi Sea Offshore Monitoring in Drilling Area ("COMIDA") program is funded by BOEMRE and collects baseline data for environmental effects analyses and monitoring. The BOEMRE database for the Chukchi Sea area lists over 900 citations for studies in the Chukchi Sea.

2. BOEMRE should more explicitly acknowledge that there is a very substantial body of highly reliable data and information that exists regarding the reasonably foreseeable probable environmental impacts of oil and gas activities in the Alaska Arctic OCS. In addition to the studies described above, the decades of closely monitored and reported oil and gas activity on the North Slope of Alaska and in the adjacent Beaufort Sea provide a huge body of information, knowledge and expertise regarding the probable environmental effects of oil and gas activities in the Alaskan Arctic. Monitoring activities by entities such as the Alaska Department of Fish & Game, the BLM, the NSB and oil and gas lessees have included caribou (since the 1970's), shore, water and upland birds (Colville River Delta since 1992; NPR-A since 1999), tundra swans (since the 1980's in the Kupuk River Unit area), and numerous fish and lakes (Colville River Delta and NPR-A). This information provides significant support for sound scientific

judgments and reasoned agency decisions in the Chukchi Sea, particularly at the lease sale stage. Again, in the context of arguments being made by the Appellants, the interests of fair and balanced public discussion and agency decision-making are best served by express acknowledgement of this reality by BOEMRE.

3. In light of the inevitable arguments of Appellants, among other advocacy groups, BOEMRE should elaborate on its existing discussion of the 2010 *Deepwater Horizon* event in the Gulf of Mexico, and why this event does not materially alter the analysis in the original Lease Sale 193 EIS and the DSEIS. Upon issuance of the final SEIS, the Appellants, or other similar advocacy groups, will likely renew their legal challenge to Lease Sale 193, including claims that the *Deepwater Horizon* event warrants a more detailed supplemental analysis. There are many sound reasons why this is not the case, as described in the DSEIS and as otherwise well-documented to and by BOEMRE. Given that BOEMRE's Lease Sale 193 decision remains subject to legal challenge, given the reasonable certainty of new *Deepwater Horizon* contentions, and given the ready accessibility of much useful information, ConocoPhillips encourages BOEMRE to elaborate on the discussion of the *Deepwater Horizon* incident in the DSEIS as it may or may not relate to the potential environmental impacts of Lease Sale 193.

Finally, for purposes of this DSEIS, ConocoPhillips supports Alternative IV, which is identified as "equivalent to affirming Sale 193 as held." DSEIS at 13. For the reasons detailed in ConocoPhillips' public comments at the time of the original Lease Sale 193 decision, ConocoPhillips believed that the better original course in this frontier area would have been selection of Alternative I (i.e., the "Proposed Action") because it establishes fewer exclusion areas from leasing. However, the current DSEIS does not arise in the context of an original lease sale decision. Under the present circumstances, the least disruptive alternative course of action – and one that is well-supported by the record – would be for BOEMRE to reaffirm Lease Sale 193.

In addition to the above broad-scale comments, attached are a few more detailed comments on some aspects of the DSEIS. Thank you for your time and attention to our comments. Please do not hesitate to contact me if you have any questions.

Sincerely,



Geoffrey A. Haddad

cc: Richard Lunam, ConocoPhillips
Trond-Erik Johansen, ConocoPhillips
Wendy King, ConocoPhillips

ConocoPhillips Company Supplemental Detailed Comments - Sale 193 DSEIS

Acronyms and Abbreviations (page ii)

Comment:

- Final SEIS – insert "Supplemental" after "Final"
- FMC & NPFMC – Fisheries Management Council & North Pacific Fisheries Management Council - are these supposed to be the same?
- NPFMC – should this be NPFMC for North Pacific Fisheries Management Council?
- ISC – this should be Ice Seal *Committee*
- IUCN/SSG – should this be IUCN/SSC?
- NC – should be *Nanuuq* Commission (<http://www.nanuuq.info>)
- TLH – Teshekpuk Lake Caribou Herd. Should this be TCH to avoid inconsistency between this acronyms table and the text in document?

I.C.5 Notices and Information Provided to Lessees (page 7)

Comment: No. 15 ("Possible listing of Polar Bear under ESA") should be revised to update this reference to current species status. The Polar Bear was listed under the ESA as of May 2008, and critical habitat will have been designated by the time of the Final SEIS.

II.E.2 Exploration Plans, and Development and Production Plans (page 8, ¶ 1)

Comment: The word "archaeological" is inconsistently spelled. In this paragraph, it differs from previous section under Ancillary Activities. See also misspelling of "archaeological" at bullet 14 in Section IV.D. The document should be checked to ensure consistency throughout.

II.E.6 Oil-Spill Response Plans (page 9)

Comment: There is a strong emphasis in the DSEIS on oil spill response. It should be noted that the operators are required to submit an oil spill response and prevention plan. BOEMRE needs to recognize that strong emphasis is placed on the prevention requirements needed to obtain a C-Plan approval.

II.D.1 Summary of Impacts: Alternative 1 – Proposed Action (page 19)

Comment: It is not clear what impacts are being referred to in the first sentence of the last paragraph. Are the impacts from noise during construction and operation?

II.D.1 Summary of Impacts: Alternative 1 – Proposed Action (page 20, ¶ 2)

Comment: The assumption that oil and gas development could have significant impacts to beluga whales and/or walrus is not provided in or supported by the DSEIS. The DSEIS should also recognize that during the exploration phases, which would be conducted during open water periods, the beluga whales are north of the lease area or, in cases of the Eastern Beaufort Stock, in the Canadian arctic. See, e.g., Suydam, et al, 2001. Satellite Tracking of Eastern Chukchi Sea Beluga Whales into the Arctic Ocean. Arctic 543:237-243 (citation in the DSEIS at page 137).

Comment: Under the Threatened and Endangered Marine and Coastal Birds subsection, and other TES sections, there is no mention of the Yellow-Billed loon. Like the Kittlitz murrelet, the Yellow-Billed loon is listed as a candidate species under the ESA. In the last chapter under Consultation, BOEMRE does include consultation for Yellow-Billed Loons.

II.D.1 Terrestrial Mammals (page 21)

Comment: It is important to mention that terrestrial-mammal population potential impacts are tied primarily to the development and production stages of oil and gas activity. Exploration efforts are conducted offshore and do not include pipeline construction, ice road, gravel roads, and permanent onshore facilities.

Comment: The statement that terrestrial mammals will be displaced by 4 km of pipelines and roads is unsupported in the DSEIS. It appears that the distance identified in literature for avoidance of roads by caribou cows with calves (by Cameron in 2005) has been applied more broadly than the scientific data and literature support.

Comment: In the last paragraph on this page, BOEMRE should reference the ADF&G census of caribou herds, and in particular the Central Arctic Herd, to support this statement. Since the beginning of tracking these animals in the 1970s, their numbers have been up and down, most recently on the uptrend, to 60,000 animals in 2008. This is the main herd that occupies and migrates through the North Slope oilfields annually.

II.D.1 Subsistence-Harvest Patterns (page 22, last ¶)

Comment: ConocoPhillips suggests that the community of Kotzebue should be added to the list of communities because, although Kotzebue is located at a greater distance, its residents rely on the same animals that move through the areas of focus.

II.D.1 Sociocultural Systems (page 23)

Comment: Much emphasis is placed on social disruption. Very little is said about the social benefits that oil and gas activities will bring to a community. Jobs, a tax base, and local economic improvement are examples of how activity will improve the rural quality of life. In other words, the DSEIS appears to only address "adverse effects from OCS activities." To ensure a balanced impact analysis, BOEMRE should also address the beneficial effects and positive impacts resulting from OCS activities.

II.D.1 Environmental Justice (page 24)

In the last sentence of 1st paragraph, the word "could" is misspelled.

III.A.5 Water Quality (page 35)

Comment: Treated wastewater discharges to the nearshore from village wastewater treatment systems are a source of water quality impacts that are not, but should be, mentioned in this discussion.

III.B.2 Diadromous Assemblages (page 38, ¶ 2)

Comment: At the end of the last sentence, the word should be "nearshore" instead of "nearshoat."

III.B.6 Other Marine Mammals (page 48)

Comment: Under the subheading of Pacific Walrus, in the 13th line of the paragraph, the word should be "Lagoon" instead of "Logoon."

Comment: BOEMRE should update this section with the recent haulout data outside of Point Lay in 2010. Although it may not be a historic haulout site, the walrus may use it again in the future if ice retreat continues as in past years.

III.C.1 Economy (page 54)

Comment: The second sentence on page 54 states that "Very few North Slope residents have been employed by the oil and gas industry or supporting industries in and near Prudhoe Bay since production started in the 1970's." This statement should be qualified to recognize that the tax base for the NSB relies in the greatest part on ad valorem taxes on oil and gas operations, which pay for the NSB infrastructure and ultimately the payroll of more than 90 percent of the NSB jobs. Benefits to the economy are discussed on page 94 under section IV.C.13.

IV.B.2 Infrastructure (page 63)

Comment: Figure 3 and the discussion of possible oil development in the Chukchi Sea OCS is overly optimistic (i.e., not realistic) under the present circumstances. For example, Figure 3 projects the drilling of exploration wells in 2009 and 2010. No exploration wells were drilled in 2009 and none will be drilled in 2010. The absence of exploration drilling due to regulatory actions of BOEMRE and due to litigation by advocacy groups is a significant and certain difference from the projected scenario.

Section IV.C.6 – Threatened and Endangered (page 79, ¶ 1)

Comment: The DSEIS states: "Sometimes even relatively low levels of noise not directly harmful to a whale itself can "mask" naturally-occurring noises upon which whales rely in order to perform basic functions such as communication, echolocation, and feeding." This statement is

not supported. The references for such an assertion should be given or the statement should be deleted.

Section IV.C.6 – Threatened and Endangered (page 80, last ¶)

Comment: The DSEIS refers to use of fixed wing aircraft to support OCS pipeline construction as “whale spotters.” Fixed wing aircraft support would be used for personnel and/or materials transport to the onshore logistics center, but not to offshore locations. It has not been proposed to use fixed wing aircraft as spotter planes. Moreover, the risks involved in sending manned aircraft at a distance offshore to monitor marine mammals will most likely result in other approaches being used. It is recommended that BOEMRE remove this reference from the document as it is speculative and contrary to anticipated activities.

IV.C.17 Environmental Justice (page 101, ¶ 4)

Comment: The DSEIS states: “Metabolic health effects may accrue if subsistence resources became unavailable or undesirable for use, if subsistence foods were displaced from the diet by increased availability or affordability of store-bought foods, or if subsistence were displaced as a primary source of nutrition because of cultural change.” Linking availability and affordability of store-bought food sources to negative metabolic health effects appears to presume that alternative food sources would necessarily result in unhealthy dietary choices. However, the availability of affordable non-subsistence foods does not equate to poor health. On the contrary, availability of fresh produce which could result in the incorporation of fruits and vegetables into the local diet would likely improve overall health. We are not suggesting that the unavailability of subsistence foods is desirable. What we are indicating here is that the statement made in the DSEIS – that diversification of diet would result in adverse health effects – is premised upon an assumption that is not warranted by the facts.

IV.C.17 Environmental Justice (page 101, ¶ 5)

Comment: The DSEIS states: “Sale 193 natural gas development and production could contribute to various ambient and ongoing localized and regional effects on social pathology (assault, alcohol and drug abuse, domestic violence, suicide, and homicide).” The elements of social pathology listed above are well documented elements of NSB village life (*i.e.*, these social issues already exist). The connection drawn between oil and gas activities as the source of the stated effects, or as a source of worsening effects, is neither supported by existing facts nor a fair assessment of the complex causes of social pathology in North Slope communities.

Comment: The DSEIS states: “The most important sources of impacts would include: Influx of temporary personnel into Inupiat villages, leading to cultural conflict and the potential for alcohol and drug importation.” Alcohol and drug issues already exist, and are not the result of oil and gas exploration or development workers being present. Villages in other areas of Alaska where no oil or gas exploration or development has occurred suffer from these social issues as well. The supposition that influx of industry personnel will increase importation is not supported by fact. The oil industry has a zero tolerance for drugs and alcohol and monitors compliance to

this standard rigidly, with funding and personnel. It is possible, that an industrial presence would decrease the availability of drugs and alcohol as employment opportunities with oil and gas industry companies would only be available to alcohol-free and drug-free applicants.

Comment: The DSEIS states: “The most important sources of impacts would include: . . . Potential local and region wide increases in income and employment, leading to a general stabilization of social pathology. An important caveat is that increased income disparity, to the extent that it occurs, may tend to increase community tension and may thus worsen these problems.” The apparent underlying assumption that community tension does not exist in a subsistence culture is not supported by fact. Moreover, employment opportunities as a result of industrial development could provide opportunities for equalization not currently available. Any employer, whether oil and gas industry related or not, would bring about the same tension, and other tensions already exist as exemplified by social issues in villages.

IV.C.17 Environmental Justice (page 102, ¶ 2)

Comment: The DSEIS states: “Injury rates could be affected by Sale 193 natural gas development and production through three pathways: . . . Social pathology leading to increased rates of alcohol and substance abuse and, hence increasing the risk of accidents, as discussed above.” Social pathology which leads to substance abuse is a complicated issue. Placing responsibility for this solely with industry is not supported by fact.

Comment: The DSEIS states: “The degree to which injury rates change as a result of the Sale 193 natural gas development and production will depend on the degree to which the potential impacts on socio-cultural characteristics, subsistence, and drug and alcohol importation into the villages occur.” We strongly reject to the assertion that increases in drug and alcohol importation into the villages are likely to occur as a result of Sale 193 activities. Oil industry companies have a zero tolerance for drug or alcohol abuse.

Comment: The DSEIS states: “Increased travel, the introduction of new populations, and the influx of visitors and temporary workers from outside the North Slope region related to Sale 193 natural gas development and production represents a potential source of infectious disease transmission, including sexually transmitted diseases, respiratory diseases, and other infections, to local residents.” The assumption that industrial workers bring an increased threat of sexually transmitted and respiratory diseases is not supported by fact in the DSEIS. For example, the incidence of respiratory disease is actually higher among the indigenous population of the North Slope than the typical industrial population.

IV.C.17 Environmental Justice – Conclusions (page 103)

Comment: The DSEIS states: “However, one can expect several forms of minor impacts related to potential effects on subsistence resources and practices, human health, and perhaps socio-cultural systems.” The statement that negative impacts to human health can be expected is not supported by fact in the DSEIS.

V.B.2 Air Quality (page 108)

Comment: Recent air quality data has been collected in Wainwright and Pt. Lay and submitted to the EPA. BOEMRE should reference this data in the first paragraph.

Routhier, Michael

From: Reed Christensen [Reed@dowlandbach.com]
Sent: Tuesday, November 09, 2010 3:02 PM
To: BOEMRE AK Public Comments
Subject: attn: Chukchi Sea Draft SEIS

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Dear Director:

I am sending this comment in support of exploration and development on the North Slope – NPRA, ANWR, Beaufort Sea, and specifically the Chukchi sea. A robust oil & gas industry is vital to the state of Alaska as well as the United States of America.

Energy is the engine of the entire US economy and Alaska holds abundant reserves, to which we simply need access. Opponents of resource development try to create unrealistic requirements in which development can only occur if any and all risks – both real and imaginary – are overcome. With this misguided thinking and mindset, nothing would ever get accomplished. We would have never had such things such as the trans-continental railroad, the Hoover dam, the Brooklyn bridge, etc.

Development should be allowed to proceed in a timely and in a responsible manner. America has the highest environmental standards on the planet, yet projects continue to be delayed through litigation and governmental bureaucracy. Like the off shore drilling moratorium, that supposedly did not include Alaska, and yet drilling permits were and still are still being withheld for activity in Alaskan waters.

The federal Bureau of Ocean Energy Management, Regulation and Enforcement should be protecting the oceans and the environment by working together with industry, not by killing the industry through regulatory delays, retroactive rule changes, and continued permit withholding.

The Alaskan oil & gas development industry is on life-support due to the unfair governmental practice of raising the hurdles each time compliance is achieved and the hurdles are crossed. It is like trying to finish a race in which the judges keep moving the finish line as the runners come close to crossing it. The lease sale took place, and the next step of development on the leased property should be allowed and even encouraged to proceed. Politics is pushing an entire industry away from the country in which the best environmental safeguards exist into countries where

Dowland-Bach Comment

little to no such environmental laws are enforced.

How long will the State of Alaska continue to be a net consumer of federal money from the national treasury? For as long as these same federal officials continue to prevent access to the very resources that made it possible for the territory to become a state at all.

Reed Christensen



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1/11/2011



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UNION OF NORTH AMERICA
LOCAL 341**

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www.local341.com



November 24, 2010

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Attn: Chukchi Sea Draft SEIS

I am writing in support of affirming the Chukchi Sea Lease Sale 193 as originally field in 2008. In light of the tragic events in the Gulf of Mexico in April 2010, it is understandable that exploration in all American waters should be done only after thoughtful deliberation. But care should also be taken when comparing conditions that led to the blowout of the Deep Water Horizon with conditions that exist in the Chukchi Sea. The first and most obvious difference is depth. Lease 193 will occur at relatively shallow depths, without the incredible pressures associated with extreme deep water drilling. Fundamental differences in the geology of the two regions make comparisons problematic.

There is a history of 30 years or more of safe drilling in the Alaskan and Canadian Arctic. Additionally, wells drilled in the Beaufort and Chukchi Seas over 20 years ago have proven safety records. As the Business Manager for Laborers' Local 341, I have a unique perspective on safety. Alaska has one of the highest union densities in the nation and the major concern for all labor unions is worker safety. Alaska's strong union presence helps to ensure a culture of safety. The unions involved with the oil and gas industry work cooperatively with the producers to make exploration in Alaska as safe as possible, not only for workers, but for the environment our families live and play in; the record proves it.

It cannot be overstated how important oil and gas exploration is to the well-being of the Arctic North Slope, Alaska, and the nation. Stable domestic energy sources are a matter of national security. Effective means of decreasing dependence on foreign oil bolsters the U.S. world position. New resource development would add literally billions of dollars to the Alaskan economy over the next 50 years. The benefit to the continental 48 states is tremendous, generating thousands of new jobs in manufacturing, computer technology, construction and maintenance.

On behalf of the 2100 members of Laborers' Local 341 and their families, I urge the Bureau to proceed with the Lease Sale. The many benefits far outweigh the relative risks.

Thank You,

A.J. "Boey" Merrick
Business Manager/Secretary-Treasurer
Laborers' Local 341

11/24

JOEY MERRICK
BUSINESS MANAGER
LABORERS' LOCAL 341

BON MCPHERSON
PRESIDENT

BON ANTILL
VICE PRESIDENT

LARRY MOONEY
BUSINESS REPRESENTATIVE

STACY ALLEN
HEALTH CARE UNIT
MEMBER

MAP Consulting, LLC Comment**Routhier, Michael**

From: Mary Ann Pease [maryann.pease.map@gmail.com]
Sent: Monday, November 29, 2010 6:20 PM
To: BOEMRE AK Public Comments
Subject: Comments on ALASKA OCS issues

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

- First and foremost - Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- Do NOT Rescind the leases. Doing so would allow a de facto moratorium on exploration and drilling. This action will greatly harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than

1/11/2011

MAP Consulting, LLC Comment

- \$72 billion over the next 50 years.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

Thanks
Mary Ann Pease

Mary Ann Pease
MAP Consulting, LLC
907-529-9719
mpease@acsalaska.net

1/11/2011



19411 Indian Hawthorn Drive, Houston, TX 77094
Telephone: (907) 350-6247 Email: hillyar.mcintosh@gmail.com

October 28, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska’s Resources

Dear Mr. Goll:

As a former Alaskan, I support the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

I believe the draft supplemental EIS released by the federal government addresses all concerns expressed by the U.S. District Court in Alaska, and I hope the federal government will approve the responsible development of the Chukchi’s abundant oil and natural gas resources.

It is important that the federal government allows access to Alaska’s vast oil and natural gas resources. Doing so provides jobs for Alaskans at a time when the economy needs help. A study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska. Total payroll is estimated to be \$72 billion (2007) over the 50-year period.

In addition, new offshore oil and gas development in Alaska will stimulate America’s economic recovery by generating thousands of new, high-paying jobs throughout the Lower 48. Some examples would be the steel and pipe manufacturers in the Midwest, coastal shippers, companies that produce advanced computer technology in California and Seattle and the skilled labor force for pipeline construction and maintenance.

Please move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi. By doing so, you are paving the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing, which is desperately needed as the amount of oil running through TAPS is declining.

Sincerely,

Hillary McIntosh
President



NEPTUNE
Shoreside Services, LLC P.O. Box 243961, Anchorage, Alaska 99524-3961

November 15, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska’s Resources

Dear Mr. Goll:

I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Thus, it is my hope that the federal government will finally approve the responsible development of the Chukchi’s abundant oil and natural gas resources.

It is important that the federal government brings Alaska’s vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, new offshore oil and gas development in Alaska will stimulate America’s economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

NEPTUNE SHORESIDE SERVICES, LLC

Robert J. Arts
General Manager

Cc: Dan Blackmore, General Steamship Agencies



North Pole Economic Development Corporation Comment



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November 2010

John Goll, Regional Director, Alaska OCS Region

Bureau of Ocean Energy Management, Regulation and Enforcement
(BOEM)

3801 Centerpoint Drive, Suite 500

Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment – Support Access to Alaska’s OCS Oil and Gas Resources

Dear Mr. Goll,

I’m writing to express my full support and the full support of my board of directors of North Pole Economic Development Corporation for the oil and gas development of Lease Sale 193 in Alaska’s Chukchi Sea.

The U.S. District Court in Alaska has raised concerns about the development of Alaska’s Chukchi Sea that have been adequately addressed in the draft supplemental Environmental Impact Statement that was released by the federal government. The court raised valid concerns on behalf of Alaskans, and now that those concerns have been answered, it’s time that we do the right thing and allow the lease holders an opportunity to develop their leases.

Tens of thousands of jobs and billions of dollars in payroll over the next generation are at stake. Boosting oil and gas development in Alaska will not only help the Alaskan economy but will help to

North Pole Economic Development Corporation Comment

improve economic conditions all over our country. During a time when our country is struggling to keep everyday Americans’ heads above water financially, why wouldn’t our nation invest in job creation? Whether developing the oil and gas fields directly or working in a support capacity, people in Alaska and across the United States are looking for opportunities to improve their lives. Oil and gas development creates good paying jobs, period.

Closer to home in North Pole, our two local refineries, Flint Hills Resources and Petro Star, Inc. rely on a supply of crude through the Trans Alaska pipeline to keep their refineries running. Today’s crude oil comes out of the pipe at around 40 degrees Fahrenheit and must be heated significantly to even refine the crude oil. This is caused by a line running at less than 60% capacity. Responsible development of the Alaska’s Chukchi Sea will give us an opportunity to put more crude oil in the pipeline which will deliver a warmer crude to our North Pole Alaska refineries thereby saving significant energy that is expended today heating our crude oil so it may be refined.

I hope to see the beginning of responsible oil and gas development in the Chukchi Sea that will allow Alaska and our nation to move forward towards energy independence and away from a deeper reliance on foreign oil. My children and all future generations are depending on us to make the right decisions now to give them the gift of abundant and clean energy, creating good jobs, which will produce a stronger United States and an Alaska that is able to take better care of itself without further reliance on the federal government.

Sincerely,

Howard “Buzz” Otis

Executive Director

North Pole Economic Development Corporation



North Pole
Economic Development Corporation

PO Box 55872, North Pole, AK 99705 - (907) 488-4558 - Fax (907) 488-3665 - www.npedc.com



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November 8 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS - Allow Responsible Access to Alaska's Resources

Dear Mr. Goll:

I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Thus, it is my hope that the federal government will finally approve the responsible development of the Chukchi's abundant oil and natural gas resources.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs - both directly and indirectly generated by increased offshore production - over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, new offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

Jeff Bentz



PRICE-GREGORY INTERNATIONAL, INC. COMMENT

November 23, 2010

Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Attention: Regional Director, Alaska OCS Bureau

Reference: Chukchi Sea Draft SEIS

Subject: Support for Alaska OCS Development / OCS Lease Sale 193

Gentlemen:

Price-Gregory International supports the exploration and development of Alaska's Beaufort and Chukchi Sea Outer Continental Shelf energy resources - specifically Chukchi Lease Sale 193. We offer the following points for your consideration:

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.

PRICE-GREGORY INTERNATIONAL, INC. COMMENT

- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than \$72 billion over the next 50 years.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states - in manufacturing, computer technology, construction and maintenance.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's oil and gas resources as the nation transitions to the new energy sources of the future.
- Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

Without question we need to focus our energy production, conservation and efficiency efforts inside our own country. We also need to transition to alternative energy sources and reduce our dependence on foreign oil. This transition, however, will take time, and domestic resources offer us the best opportunity to bridge that gap. They will allow us to increase our energy independence and national security and decrease the amount of money we transfer to foreign economies. Development of Alaska's OCS and North Slope Gas resources offer us the best opportunity to realize this goal.

Very truly yours,

PRICE-GREGORY INTERNATIONAL, INC.

Will Chinn
Project Development Manager



Founded 1975
Executive Director
2010-2011 Executive Committee
Phil Cochran, Sr. Vice President
L.F. "Lee" Hordt, Vice President
Eric Holstad, Treasurer
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Wendy Lindskoog, Past President
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John Sturgeon
Dan Sullivan
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Jan Trigg
John Zager
Ex-Officio Members
Senator Mark Begich
Senator Lisa Murkowski
Congressman Don Young
Governor Sean Parnell

November 30, 2010

Mr. John Goll, Regional Director
Bureau of Ocean Energy Management, Regulation & Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Re: Lease Sale 193

Dear Mr. Goll:

The Resource Development Council (RDC) appreciates the opportunity to submit comments on the Draft Supplemental Environmental Impact Statement (SEIS) for Lease Sale 193. RDC urges the Bureau of Ocean Energy Management, Regulation & Enforcement (BOEM) to affirm Lease Sale 193 as held in 2008. We believe the SEIS provides sufficient information and analysis to support a decision affirming the sale.

RDC is a statewide membership-funded organization founded in 1975. Our Alaskan membership is comprised of individuals and companies from Alaska's oil and gas, mining, timber, tourism, and fisheries industries, as well as Alaska Native corporations, local communities, organized labor, and industry support firms. RDC's purpose is to link these diverse interests together to encourage a strong, diversified private sector in Alaska and expand the state's economic base through the responsible development of our natural resources.

RDC has a high level of confidence that exploration and development can occur safely in the Arctic and that mitigation measures can be put in place to address most concerns and minimize impacts to the environment, polar bears and other species, as well as subsistence. However, since recent events in the Gulf of Mexico, opponents of offshore drilling are calling for an indefinite ban on new exploration and development in Alaska. RDC sharply disagrees. Operating conditions in these waters are categorically different than those in the deep waters of the Gulf of Mexico and pose much lower risk. Moreover, the processes and safeguards in place today in Alaska should allow leasing and exploration activity to resume in the Alaska OCS.

Drilling in the Arctic offers distinct difference than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in

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deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. In addition, the relatively shallow water depth in the Chukchi Sea would allow blowout preventers to close much more rapidly than those in deep water. The blowout preventers would also be directly accessible to dive teams, unlike the Gulf where any maintenance or repairs had to be accomplished by remote control vehicles. Another distinction is that many Alaskan offshore operations are seasonal in nature. For example, Shell has proposed conducting its exploratory drilling during the summer and fall open water season. Ice management vessels will be positioned on site to deflect any ice flows that could potentially approach a rig. There are also major differences between state and federal oversight and regulatory frameworks, as well as fundamental differences in the geology of the regions. All of these contrasts warrant special consideration in public policy decisions and should lead the BOEM to conclude that exploration should move forward in the area covered by Lease Sale 193.

Advances in technology provide an additional measure of confidence in Alaska drilling. Energy development in Alaska is subject to in-depth analysis by federal law, a stringent permitting process, and oversight by state and federal agencies. In every instance, development is preceded by extensive studies. The North Slope and the offshore are now perhaps the most studied energy basins in America. The federal government has spent more than \$500 million on studies in Alaska and in the past decade the agency has funded over 250 studies here, with the majority of those focused on the Beaufort and Chukchi Seas.

RDC recognizes that subsistence whaling is vitally important, both economically and culturally to North Slope villages. Industry and government working together have the ability to protect subsistence resources while producing needed domestic energy for the nation. Strong regulatory oversight, combined with other mitigation measures, can be employed to protect all resource and subsistence users.

While the Chukchi and Beaufort Seas are considered frontier areas, exploration activity has occurred there before. In fact, thirty wells have been drilled in the Beaufort and five in the Chukchi - all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. Moreover, there has never been a blowout in the Alaska or the Canadian Arctic that has resulted in an oil spill.

Opponents of oil exploration have cited the lack of infrastructure in the Arctic as a reason not to drill in the region. However, it is important to note that additional infrastructure will be built to accommodate future needs once exploration and development activities move forward. The lack of infrastructure today is due directly to the fact that there has been virtually no ongoing development or commercial activity of any kind offshore in the Arctic. However, Shell has committed to stage extensive resources onsite to immediately respond to any incident. The company has also committed to building and staging in the region a pre-fabricated dome to place over a troubled well. Moreover, virtually all functions of Shell's operations will be monitored at remote sites off the rig, giving industry and government critical "real-time" data and allowing for early detection of potential problems. In addition, the Alaska Clean Seas consortium has substantial resources and experience in the Arctic and has done extensive mapping to identify sensitive areas. The consortium has also conducted extensive safety and oil spill drills in the Arctic and has active research programs dating back into the early 1980s.

It is important to note that not all questions and concerns regarding oil and gas exploration and development can possibly be answered and met. Not all risks can be eliminated. If the federal government insists that every concern and risk be eliminated, then it must be prepared to import virtually all the oil the nation requires to meet future needs. It must then also accept the consequences of a much heavier reliance on foreign oil, including soaring trade deficits, a weaker and more vulnerable economy, and compromised national security. Put another way, failure to move forward with OCS development in Alaska will put the state economy at risk, as well as the nation's security.

OCS oil and gas development is absolutely critical to Alaska's future economy. With the Trans-Alaska Pipeline System (TAPS) now running at one-third capacity, exploration blocked in the Arctic National Wildlife Refuge (ANWR), and non-development activists working toward Wilderness designations in the National Petroleum Reserve (NPR-A), nothing less than Alaska's future economy is at stake.

The responsible development of potentially immense oil and gas deposits in the Chukchi Sea would significantly boost the economy and extend the life of TAPS. Without new federal oil production, TAPS could be uneconomic to operate at some point in the next decade.

Between ANWR, NPR-A and the Alaska OCS, there could be nearly 40 billion barrels of oil in place. By comparison, 16 billion barrels of oil have been produced on state lands across the North Slope in 33 years. The sustainability of TAPS and Alaska's economy will largely depend on some combination of oil production from these federal areas, which represent the nation's best onshore and offshore prospects for major discoveries.

If there is no oil and gas development in ANWR or in the Chukchi Sea, and the best prospects in NPR-A are ultimately taken off the table, the federal government must then accept the consequences, as outlined earlier in these comments. For Alaskans, our future will be bleak with the state losing 90 percent of its revenue base.

Not developing federal oil in Alaska makes no sense from an economic and energy security stand point, especially given the fact that America imports over 60 percent of its oil, and at a great cost. American oil production is projected to decrease by 9.9 billion barrels within the next 20 years, nearly a 15 percent annual decrease from current levels. Meanwhile, imports of oil from OPEC are projected to increase by 4.1 billion barrels, nearly 19 percent - and at a cost of \$607 billion.

New production in the Alaska OCS would reduce America's reliance on foreign energy. The Alaska OCS is an important future source of U.S. energy supply with up to 29 billion barrels and over 200 trillion cubic feet of natural gas potentially in place. The potential recoverable reserves offshore Alaska is more than all the current total proven U.S. oil reserves of approximately 21 billion barrels. Alaska could have the ninth largest oil resources in the world ahead of Nigeria and Libya - if access is granted to these potential reserves. Moreover, OCS gas reserves would significantly improve the long-term economic viability of the proposed gas pipeline from the North Slope to the Lower 48 - a clean energy priority of the Obama administration. To become a reality, the pipeline requires additional gas reserves beyond what has already been discovered onshore.

Given its potential for immense recoverable reserves and enormous economic benefits to the state and nation, the Alaska OCS should be opened to responsible development. OCS development would generate hundreds of billions of dollars in royalty and tax revenues to the state and federal governments and aid the nation's economic recovery by reducing the trade deficit and creating tens of thousands of new jobs. Indeed, OCS leases off Alaska's coast have already generated billions of dollars to the federal treasury.

The OCS can sustain Alaska's economy for generations. Currently there are more than 108,000 Alaskan jobs tied to the discovery, production and shipment of Alaskan oil and natural gas, accounting for more than 15 percent of Alaska's population. According to a University of Alaska study, OCS production could provide an annual average of 35,000 additional jobs within the state for 50 years and \$72 billion in new payroll.

RDC and many Alaskans share President Obama's view that America needs to conserve more and put new emphasis on renewable and alternative energy. By doing so, the nation can ultimately break its reliance on foreign oil. Yet while America must conserve more and move toward renewable energy, it still needs to pursue new oil and gas production, given the fact it will take decades before renewable energy becomes a dominant energy source. Even with the Obama administration's goal to decrease dependence on oil, it is projected that fossil fuels will still account for two-thirds of this nation's energy consumption in 2025. Meanwhile, every barrel of oil that is not produced in the U.S. will be imported from abroad to meet our needs. Given economic, environmental and geopolitical concerns, America must produce more of the oil it consumes - under American laws, regulations and oversight, and by American workers.

It is vital that our nation's abundant energy resources be fully utilized for compelling economic and energy security reasons. RDC encourages BOEM to re-affirm Lease Sale 193 as held in 2008. Thank you for the opportunity to provide comments.

Sincerely,

[Signature]
Carl Portman
Deputy Director



Shell Exploration & Production Company

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November 29, 2010

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive
Suite 500
Anchorage, Alaska 99503-5820

RE: Comments on Lease Sale 193 Draft Supplemental Environmental Impact Statement

Dear Regional Director,

Shell Exploration & Production Company ("Shell"), on behalf of its affiliate, Shell Gulf of Mexico Inc. ("SGOMI"), a successful bidder in Oil and Gas Lease Sale 193, is pleased to have the opportunity to comment on the Bureau of Ocean Energy Management, Regulation, and Enforcement's ("BOEMRE's") Chukchi Sea Planning Area Oil and Gas Lease Sale 193 Draft Supplemental Environmental Impact Statement ("Draft SEIS"). Shell commends BOEMRE on its thorough and efficient response to the remand instructions issued by the U.S. District Court for the District of Alaska.

The court instructed BOEMRE to supplement its review of Lease Sale 193 under the National Environmental Policy Act ("NEPA") by analyzing three issues: (i) the environmental impact of natural gas development; (ii) whether missing information identified in the Final Environmental Impact Statement for Oil and Gas Lease Sale 193 and Seismic-Surveying Activities in the Chukchi Sea ("193 FEIS") was essential or relevant under 40 C.F.R. § 1502.22; and (iii) whether the cost of obtaining the missing information was exorbitant, or the means of doing so was unknown. Shell believes that BOEMRE properly restricted its analysis to these three issues, both because of the court's specific instructions to conduct a narrow remand analysis, and because BOEMRE properly determined that additional information identified by BOEMRE does not warrant re-opening its earlier findings.

These comments first address the issues identified for remand, the natural gas development and production scenario and the missing information identified in the 193 FEIS. Then these comments will address BOEMRE's decision to restrict its review on remand only to those issues, which is entirely consistent with the court's order.

I. Natural Gas Exploration and Production Scenario

Shell supports BOEMRE's determination of the most likely natural gas development and production scenario in the Draft SEIS. BOEMRE is correct that it is reasonable to expect economic considerations will restrict any natural gas exploration and production to projects coincident with and subsequent to oil exploration and development.

The Draft SEIS undertakes an analysis of the impacts to be expected from the natural gas development and production scenario, comparing those impacts to those already analyzed for the oil production scenario. Shell believes the analytical framework used is proper and careful, enabling BOEMRE to identify all reasonably foreseeable impacts associated with the natural gas development and production scenario.

To assist BOEMRE with preparation of the Final Supplemental Environmental Impact Statement, Shell offers the following comments on the analysis of the natural gas development and production scenario:

- In the Description of the Environment, BOEMRE often states that analysts reviewed "additional information" for natural gas development and production and concluded that, for the given resource under discussion, "this information" would not change the analysis or alter the conclusions discussed under environmental consequences in Chapter 4. See, e.g., Draft SEIS at 36 (addressing new information related to water quality). In light of the court's remand instructions regarding unknown information, Shell is concerned that BOEMRE's conclusions about additional information, when formatted in this way, are unnecessarily vague. In other cases, BOEMRE specifically identifies the new information analyzed. See, e.g., Draft SEIS at 35 (describing new information related to sea ice analyzed for natural gas production). Shell suggests that BOEMRE identify the new information reviewed in all cases, or where there is no new information available, state that no new information is available.
- The Draft SEIS could be read to be inconsistent in its treatment of well control events. In Section II.C.3, discussing issues considered but not analyzed, BOEMRE determines that information regarding the Deepwater Horizon incident is not relevant to the Draft SEIS because, *inter alia*, "any change in the likelihood of an oil spill from a blowout" during exploration drilling would not alter the potential effects of the oil spill already analyzed. Draft SEIS at 16. Shell agrees with BOEMRE's analysis on this point, as discussed below in Section III of these comments. However, as drafted, this sentence could be read to indicate that the Deepwater Horizon incident could affect or change prior analysis of the likelihood of a well control event in the Arctic. In Section IV.B.5, the Draft SEIS addresses the potential for natural gas releases, including the potential for a loss of well control. This section does not reference the Deepwater Horizon incident, either to adjust the analysis of the likelihood of a loss of well control event, or to explain why the analysis done in the 193 FEIS remains valid. Shell suggests that BOEMRE address this issue, which affects the natural gas development and production scenario and is therefore properly within the scope of the remand.
- On page 41 there is a broken cross-reference.

- On page 43 it is unclear what new information regarding whales (sightings of fin whales, humpback whales, or both) resulted in reinitiation of Endangered Species Act consultation with the National Marine Fisheries Service for Outer Continental Shelf activities.
- In Section IV.C.2, discussing the air quality impacts of natural gas exploration and production, the Draft SEIS does not specify why it forecasts emissions and impacts for some pollutants (VOCs, ozone, greenhouse gases and visibility), but not others. Specifically, the basis for the comment "any increase in the concentrations of criteria pollutants from these activities would be small, local, and temporary" is unclear. Shell suggests BOEMRE clarify the scope of the air analysis performed for the natural gas development and production scenario and provide a basis for the conclusion that increases in pollutants due to natural gas development and production are likely to be small, local, and temporary. Further BOEMRE should identify the applicable air quality standards against which it measured the anticipated air quality impacts and provide the basis for its determination of the applicable air quality standard.
- On page 82, the second paragraph in the section titled, "Potential Effects from a Natural Gas Release," appears to be missing introductory text.

II. Unknown Information

Shell supports the rigorous analytical process by which BOEMRE complied with the second and third issues on remand. The explanation of the agency's methodology in Appendix A, including the flowchart on page 2 of Appendix A, clearly demonstrate the legal analysis required by 40 C.F.R. § 1502.22. The "1502.22 Analysis" at the conclusion of Appendix A fully responds to the court's instructions and satisfies the agency's obligation under the regulation to (i) identify whether missing information is "relevant to reasonably foreseeable significant adverse effects on the human environment," (ii) identify whether missing information is "essential to a reasoned choice among alternatives," and (iii) identify whether the missing information is "obtainable."

Shell agrees with BOEMRE's well-reasoned analysis for the various "missing information" from the 193 FEIS. The Chukchi Sea is a frontier area. Nevertheless many studies already have been conducted and substantial base line data gathered on the region. While there remains more to be learned about the Chukchi, as BOEMRE ably summarized in pages 3-4 of Appendix A, those gaps in knowledge do not preclude the agency from making a reasoned choice among alternatives.

Shell is concerned about BOEMRE's treatment of missing information pertaining to natural gas development and production within the text of the Draft SEIS. On page 4 of Appendix A, BOEMRE states "no incomplete or unavailable information pertaining to natural gas development and production was considered essential for a reasoned choice among DSEIS alternatives." SGOMI argued in litigation, and continues to agree, that such an approach is sufficient under the regulation. Nevertheless, Shell is concerned about the appearance of inconsistency between the treatment of "missing information" from the 193 FEIS and missing information in the Draft SEIS. Shell urges BOEMRE to consider bolstering its analysis of the "missing information" from the Draft SEIS by undertaking the same rigorous analysis of that information that it did for the "missing information" from the 193 FEIS.

III. Limited Remand Is Proper

Shell supports BOEMRE's decision to restrict its review on remand to only those topics identified by the court. Shell also believes it was proper for BOEMRE to consider whether information from the Deepwater Horizon incident could or should impact the remand analysis. Shell concurs with BOEMRE's conclusion that, because the natural gas development and production scenario assumes that natural gas development would take place after oil development is substantially complete, the risk of an oil spill occurring during the natural gas development and production scenario is unlikely. Draft SEIS at 16. Thus, Shell believes that BOEMRE reasonably did not include current information from the Deepwater Horizon oil spill incident in its remand analysis of the natural gas production scenario.

Shell further agrees with BOEMRE that, even if the remand were broad enough to include analysis of potential impacts related to the production of oil, current information from the Deepwater Horizon incident does not warrant additional analysis of those issues on remand. Draft SEIS at 16. Shell agrees with BOEMRE that the differences between the Gulf of Mexico and the Chukchi Sea cited in the Draft SEIS make it unlikely that current information from the Deepwater Horizon would be relevant to impacts from a potential oil spill in the Chukchi Sea. In particular, Shell notes that the impacts of a catastrophic spill have already been analyzed in the Arctic. See Final Environmental Impact Statement - Beaufort Sea Planning Area Oil and Gas Lease Sales 186, 195, and 202. Thus, supplemental analysis to review the potential impacts of a spill such as the Deepwater Horizon is unnecessary because the analysis already exists.

IV. Timely Issuance of Final SEIS

Earlier this year, President Obama announced the Administration's renewed intention that oil and gas exploration at existing Beaufort and Chukchi Sea leases move aggressively forward, stating that "we'll continue to support development of leased areas off the North Slope of Alaska," among other areas, and noting that, "given our energy needs, in order to sustain economic growth and produce jobs, and keep our businesses competitive, we're going to need to harness traditional sources of fuel even as we ramp up production of new sources of renewable, homegrown energy."¹ In an announcement the same day, Interior Secretary Salazar amplified that "[t]he Administration strategy supports exploratory drilling in the Chukchi and Beaufort Seas in the Arctic Ocean."² Here, BOEMRE undertook a thorough evaluation of all the relevant issues pursuant to its obligations under the Outer Continental Shelf Lands Act and NEPA, and it should issue its final finding without further delay.

As BOEMRE is aware, successful exploration is a prerequisite to further oil and gas development projects. Every delay in the exploration of these leases therefore reduces industry's opportunity to find other viable oil deposits and to bring its leases into production. Delay will also jeopardize

¹ Remarks by the President available at: <http://www.whitehouse.gov/the-press-office/remarks-president-energy-security-andrews-air-force-base-3312010> (March 31, 2010).

² Department of the Interior Press Release available at: http://www.doi.gov/news/pressreleases/2010_03_31_release.cfm (March 31, 2010).

Shell Exploration & Production Company Comment

hundreds of jobs and contracts for local Alaskans who have been engaged to support industry activities. For example, for its 2010 season, SGOMI and its affiliate Shell Offshore Inc. ("SOI"), which holds leases in the Beaufort Sea, contracted with approximately 80 local Alaskan businesses, including many native-owned businesses, to provide a wide range of services associated with its 2010 Chukchi and Beaufort Sea Exploration Plans ("2010 EPs") such as engineering, consulting, communications, inspection and testing, emergency response, transportation, catering, information technology, and related services. These businesses collectively earned more than \$127 million before the 2010 season was shut down.

SGOMI and SOI invested a substantial amount of time and money in its 2010 EPs. But their ability to continue to invest in drilling plans for 2011, as well as future seasons, is significantly hampered by the present uncertainty regarding oil and gas exploration activities in the Arctic Outer Continental Shelf. In fact, if certainty on whether such activities will be allowed to occur in 2011 is not achieved very soon, I do not believe that SOI or SGOMI will incur the additional substantial costs necessary to prepare for a 2011 season that ultimately may not be allowed. I therefore urge prompt agency action to close-out this remand.

Sincerely,


Peter E. Slaiby
Vice President, Shell Alaska



November 30, 2010

John Goll
Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Attn: Chukchi Sea Draft SEIS

Dear Director Goll:

Statoil USA E&P Inc. ("Statoil") appreciates this opportunity to provide comments to the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") on the Draft Supplemental Environmental Impact Statement ("SEIS") for the Chukchi Sea Planning Area Oil and Gas Lease Sale 193 ("Lease Sale 193").

Statoil ASA and its affiliates (collectively, "Statoil ASA") comprise an international energy company with operations in 34 countries. We have more than 35 years of experience from oil and gas production on the Norwegian Continental Shelf, where we operate 80% of the production. Statoil ASA is the largest deepwater operator in the world, and we are committed to accommodating the world's energy needs in a responsible manner, applying technology and creating innovative business solutions. Statoil ASA entered the U.S. market in 1987, and we are now one of the largest leaseholders in the deepwater Gulf of Mexico and the designated operator on 181 leases.

Statoil's move into Alaska is part of a corporate-wide initiative focused on exploration and development in the Arctic. Statoil ASA is one of the world's leading explorers in the Arctic. In the Norwegian part of the Barents Sea, Statoil ASA has been the operator on 63 of the 83 wells that have been drilled. We operate the Snohvit LNG project – the first offshore development in the Barents Sea without any surface installations. In Russia, Statoil ASA has a 24% working interest in the Shokman gas and condensate field in the Barents Sea. We are also partners in the Terra Nova, Hibernia, and Hebron assets in Newfoundland and in exploration acreage off Canada's Grand Banks.

In early 2007, Statoil ASA began an evaluation of Arctic Alaska as a potential place to do business. This evaluation was part of a larger internal project called the "Arctic Initiative," which was an appraisal of all the Arctic oil and gas basins in the world. In Alaska, the focus was on the federal OCS, especially the Chukchi Sea. In 2008, Statoil acquired 16 leases during Lease Sale 193. Statoil also has a 25% ownership stake in ConocoPhillips' Devil's Paw prospect in the Chukchi Sea, which ConocoPhillips acquired under Lease Sale 193. Statoil is pursuing investments in the Chukchi Sea because of the area's significant hydrocarbon potential.

Statoil recently completed a seismic program over its leasehold and surrounding areas in the Chukchi Sea. We are actively planning programs in support of exploratory drilling activities in

the Chukchi Sea. However, overcoming the challenges to exploration in the Chukchi Sea requires significant investment and a regulatory environment that is predictable, stable, and transparent. To ensure continuing investment, it is critically important that BOEMRE expeditiously resolve the uncertainty concerning Lease Sale 193 as well as the continuing uncertainty concerning the Outer Continental Shelf Oil and Gas Leasing Program for 2007-2012.

Statoil has reviewed the Sale 193 Draft SEIS and believe it fully addresses the concerns identified by the District Court of Alaska. We encourage BOEMRE to expeditiously finalize the SEIS and adopt Alternative IV as the agency's preferred alternative.

In closing, we commend BOEMRE for developing the draft SEIS on a quick timeframe and look forward to BOEMRE's timely adoption of the preferred alternative. The preferred action is a solid step towards fostering a predictable regulatory climate that encourages responsible oil and gas investment in the Chukchi Sea, while ensuring a balanced and environmentally responsible approach to management of Arctic resources.

Thank you for consideration of our comments.

Very truly yours,


Martin Cohen
Alaska Exploration Manager
Statoil USA E&P, Inc.



TEXPLORE, Inc.

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October 28, 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
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RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska's Resources

Dear Mr. Goll:

Texlore is a small independent exploration company based in Texas and operating primarily in the Gulf Coast region. I have been personally involved in offshore exploration and development, and in spite of recent anomalies, offshore activities can be conducted in a safe and prudent manner. I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska, even though I have no direct benefit from this activity, other than the belief that it is beneficial to the citizens of the United States to develop energy resources domestically and reduce our dependence on foreign supplies for strategic and economic reasons.

It is my hope that the federal government will approve the responsible development of the Chukchi's abundant oil and natural gas resources, since the draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back into play. Jobs, in Alaska and across the nation, depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

New offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, advanced computer technology in California and Seattle, and Union Labor for pipeline construction and maintenance.

I strongly urge that the federal government move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,



Paul W. Britt,
President

General Public

From: Ransom Agnasagga [Ransom.Agnasagga@north-slope.org]
Sent: Monday, November 29, 2010 2:13 PM
To: BOEMRE AK Public Comments
Subject: Public Comment on Chukchi lease sales and drilling.

Good day to you all. My name is Ransom G. Agnasagga, Agiusin my inupiaqsi name, husband of Linda Lee, Sunnauravik, father of six and grandfather of two, I live in Ulguniq, Wainwright Alaska on the Arctic coast, I have lived here in Wainwright since 1982, before that I lived in Kali, Pt. Lay Alaska which is further down the coast from here, and between the villages is Icy Cape, Qayaqsiqvik, Nannugvik, are the Inupiat names that I know this place as. This is the area of my ancestors the Uttuqagmiut, named after the river that flows down from the Brooks Range to the Kasegealik Lagoon then into the Arctic Ocean, into the area that will be directly affected by all the activity is bound to take place due to the quest for fuel that drives our nation. I have hunted this region since I was able to walk, from Cape Sabine through the Delong Mountains and through the headwaters of the Colville, Utuqqaq, Qaqalik, Kuukpaagruk, Kaolak, Ketik, Avalliq Ivisurak rivers, I have also hunted on the Arctic ocean off the coasts in the area to be affected, I have seen how the climate has changed over the past 20 to 25 yrs, and already a challenge that we as people and also animals that inhabit the region are facing. This is probably a most challenging dilemma that we are all faced with now. All of the Mammals, migratory birds, fish, and "we" the "Minority" as commented in the draft plan that was drafted, the Inupiat people all up and down the coast and beyond our own shores, and also the food chain, will be exposed to an activity not seen in the region ever before. We all do not know where this will lead, or even if we have a choice, but it is said, we all have a right to voice our opinions, even if it might not be deemed as important. I for one will not say whether or not that his will all be good for the region and the Inupiat people or not, as I wrote earlier this has not been done here before. We probably all, at a point in some time in our lives thought twice about something that will directly affect the way we live our daily lives, or what can occur if we do not prepare, I believe that if the exploratory drilling does occur and if the projected amount of oil and gas is really there, there will be a frenzy of more activity, with other oil and gas companies, and also other countries that are also in need of oil, will be very interested in the findings of the exploratory drilling wells. And that will bring a whole new perspective to the table that definitely might be out of our control unless we prepare for it. We need to have concerns addressed, and answers and solutions in place before the proposed activity can occur. Thank you for your time in reading this.

1/12/2011

From: Gail Amalfitano [ecogail@gmail.com]
Sent: Saturday, November 13, 2010 8:26 PM
To: BOEMRE AK Public Comments
Subject: Comments on the Chukchi Lease Sale Draft SEIS

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) has determined that despite huge gaps in information about bowhead whales, polar bears, walrus and pretty much all living things in the Arctic, it was not a mistake to sell the Chukchi Sea off to the highest bidders in 2008.

This conclusion is simply wrong. Drilling in the Arctic is too risky. The Arctic is already weakened and fragile because of the warming climate. What's more, there is simply no technology to clean up oil in broken ice conditions. There is no way to mobilize even a fraction of the response required for the Gulf disaster in the remote Arctic. And a large oil spill could mean the difference between survival and extinction for struggling Arctic species.

Unfortunately, your draft supplemental EIS does not come anywhere near addressing these problems of critical importance. Your draft supplemental EIS does not satisfy your obligation to protect America's Arctic, and it does not comply with the law. In order to comply with the law, you must analyze the substantial gaps in scientific information in the current EIS and make a good-faith effort at obtaining information that is realistically attainable. And most importantly, you must not allow drilling to go forward unless you have the scientific knowledge to say that drilling in the Arctic is safe.

I am geology major at FAU in Boca Raton. I also minor in GIS. I am aware of the steps that could have been taken (in relation to the gulf spill) to lessen the impact of an accidental spill on the local environment.

It is wrong and irresponsible to treat the Earth's resources like they belong to this generation only. It is irresponsible to act recklessly with the future health of the planet and leave future generations with a mess much like the financial mess we are in now only it will be environmental and resource related. Oil does not even have a department devoted to analyzing possible accidents and responses to those accidents, researching and experimentation of how to deal with all possible problems and doing things before they drill for the "just in case" spills. Safety is being ignored and it is the least oil can do since they are taking oil out of PUBLIC lands and are giving back very little. America is tired of greed oriented actions and policies.

Nothing was learned from the BP disaster. America watched those people lose their businesses, the jobs, their homes, their boats, and in some cases their families. We watched the children struggle to understand why their parents separated or why their lives were turned upside down. America watched the SUFFERING of so many good, hard-working Americans. We watched grown men cry.

If this is not enough to cause you some pause, then I would feel that you have no heart or compassion or love for fellow Americans. BP will happen again because no changes have been enacted, no pause to drilling has been ordered until they make some changes, this means that nothing has changed and no one cares who is getting paid enough to ignore such horrible tragedies.

Please, I urge you to demand a pause in drilling until ALL oil companies form a REAL department with REAL engineers, scientists, ecologists, and geologists that do nothing but research, analyze, and come up with solutions to all possible accidents. Not only must they form this department, but it must be properly funded and their findings must be taken seriously, and their solutions must be followed.

I do not think this is unreasonable. I think this is a smart beginning; it would improve

1

their public image, and promote safety while preparing them for accident and response efforts. Let us not EXPERIMENT with dealing with a spill in the Arctic now. BP may have learned by Exxon's failures, but still they respond ineptly and like a bunch of clumsy undergraduates in the lab for the first time.

It is time to enact some rules here and stop allowing oil companies to worry about accidents only when they happen, and then experiment on the unlucky AMERICAN citizen that happens to be affected by the next spill that will happen because nothing has changed.

Although I consider myself leaning more towards environment, I am realistic that oil will always be needed. However, that does not mean we can be irresponsible with the lives of Americans. Saying one doesn't believe in the climate crisis is not a license to be irresponsible with the resources of the planet. We have a responsibility to future generations and that has nothing to do with believing in what the climate is or is not doing.

The problem is greed, refusals to change and implement change, leaders that are out of touch with mainstream Americans, leaders that do not care about regular Americans that cannot buy representation, and a large amount of irresponsible attitudes of our leaders.

We really need a leader. We really need a leader to come forth and say, ENOUGH! It is time to return to basic American values, honor, loyalty, respect, and working to do things for THE COMMON GOOD OF ALL. Somewhere that ideal has been lost and trampled with several other purely and uniquely American values. THE COMMON GOOD OF ALL. Lastly, it is wrong to destroy the Arctic that belongs to the next generations of America. There seems to be too much arrogance, egotistical ideals, self-service and self-serving practices, that HONOR AND DUTY have become punch lines for election campaigns. These words used to represent things that are very American.

It should be no surprise that many Americans find it hard to be a Proud America, or proud of their country, or proud of its leaders. It is becoming increasingly embarrassing to think of one's self as American. Lately the only thing we represent is the embodiment of Greed, Irresponsibility, Drunk with Power, Lacking Human Compassion, no Fairness, no commitment to solutions, attitudes childish in nature refusing to compromise to reach meaningful solutions because it is our way or no way leading to an out of control spin downwards.

Can you please restore some honor by enacting some demand for safety by requiring the creation of this department that deals with these issues? Let us pause, regroup, make changes, and learn from mistakes rather than living in a loop that never ends. Can you be that leader? Can you stop this endless loop, this loop of destruction and failure.

Gail Amalfitano
 2517 S.W. Barber Lane
 Port Saint Lucie, FL 34984
 US

Regional Director, Alaska OCS Bureau
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820
 ("Attn: Chukchi Sea Draft SEIS")

Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193. I support OCS production in Alaska.

BRANDON ENTE, *[Signature]*
 P.O. BOX 58327 FBX, AK 99711

RECEIVED
 10 28 2010
 BOEMRE AK PUBLIC COMMENTS

November 27, 2010

November 8 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Robert LaBelle
Chukchi Sea Draft SEIS
Bureau of Ocean Energy Management, Regulation, and Enforcement
Alaska OCS Region
BOEMREAKPublicCommen@boemre.gov

RE: Chukchi Sea Draft SEIS – Allow Responsible Access to Alaska’s Resources

Subject: Chukchi Sea Draft EIS

Dear Mr. Goll:

Dear Mr. LaBelle:

I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

Please cancel Chukchi Sea lease sale 193. I have been involved with onshore oil and gas development for the past ten years and have been to the Arctic coast. Oil and gas development does not belong in such a sensitive and fragile ecosystem as the Arctic Ocean. The time to prevent an environmental tragedy is now, prior to leasing. Once leases are issued it is too late despite all the stipulations, mitigation, and good intentions of regulators when permitting development. Believe me, I've spent the last four years participating in an effort to prepare an environmentally responsible oil and gas management plan in another fragile ecosystem, that should not have been leased, it cannot be done.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Thus, it is my hope that the federal government will finally approve the responsible development of the Chukchi’s abundant oil and natural gas resources.

One of the reasons that the Alaska District Court remanded the original EIS was for more information. The supplemental EIS still lacks sufficient information for making an informed decision.

It is important that the federal government brings Alaska’s vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs – both directly and indirectly generated by increased offshore production – over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

The recoverable reserve is unknown and speculative. The purpose and need statement makes it clear that the recoverable reserve is unknown; "offer for lease areas in the Chukchi Sea Planning Area of the Alaska Outer Continental Shelf (OCS) that might contain economically recoverable oil and gas resources." The extent of the reservoir should be known before determining the lease sale area. Don't make a large geographic area available for oil and gas simply because it may avoid political controversy, i.e. not precluding a potential use. I've seen this happen too many times, and once an area is leased it is too late. This is exactly what has happened in my region. An entire intermountain basin was made available for oil and gas as the managers were certain development would remain in the traditional conventional oil fields. Low and behold, new technologies made previously overlooked reservoirs economically feasible for development. Now they're dealing with development proposals in some extremely fragile ecosystems which cannot be reclaimed. These fragile ecosystems never should have been leased, please do not repeat this mistake.

Further, new offshore oil and gas development in Alaska will stimulate America’s economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

Polar bear critical habitat was designated by the U.S. Fish and Wildlife Service on November 24, which includes the lease sale area. The EIS essentially postpones polar bear consultation until time of development. Impacts to polar bears must be considered now, at leasing, waiting until development is too late. The EIS promises that consultation will be reinitiated when critical habitat is defined. Now that critical habitat has been defined, the EIS should be put on hold (or better yet cancelled) and full formal consultation reinitiated, not incremental consultation.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

JRF BERTZ

NOV 27 2010
11:44:30 AM
BOEMRE

Thomas E and Patricia Bills Comment

Thomas E and Patricia Bills Comment

Page nine states that Best Available and Safest Technology will be required but provides insufficient information as to what these best and safest technologies are. How can an informed decision be made if these technologies are not identified? The specific technologies to be required should be listed not broad categories. Similar terminology is used in the onshore world and it provides little if any environmental safeguards. The companies determine what they feel is technologically and economically feasible with little dispute from the federal regulators. Therefore proven feasible technologies are not utilized.

The summary of impacts (pgs. 18-24) is too generic and subjective providing insufficient information for an informed decision. As a decision maker is unlikely to read the entire EIS and will instead concentrate on the summary it is imperative that the summary is sufficient for making an informed decision. Impacts are discussed in subjective terms such as "moderate" but there is no definition of the impact categories; i.e. "risk of a large oil spill is low". What is low? "Any increase in concentrations of criteria pollutants would be small, local, and temporary." Please define small, local, and temporary. These are all subjective terms, which unless defined, are left open for interpretation. Even when impacts are identified as significant there is no or little quantification of the impact. "A large oil spill or chronic small-volume oil spills impacting intertidal or estuarine habitats used by early life-history stages of Pacific salmon would be likely to result in significant adverse effects on local populations. These would require three or more generations to recover to their former status." How many more generations for full recovery, one or two more or several more generations? Impacts lasting multiple generations can increase exponentially with each generation lost to the point populations may never be able to recover. Temporary and nonlethal effects to ESA listed marine mammals should be explained better. Will these temporary and nonlethal effects interfere with foraging, breeding, or other activities that could have long-term population level impacts? What is the difference between substantial impacts and significant impacts? These are just a few examples of the insufficient information, the pattern continues throughout the document.

An oil spill response plan is not required until a facility is put into use (pg. 9). This is ludicrous, has the Deepwater Horizon disaster taught us nothing? British Petroleum and the federal government were caught totally off-guard and acknowledged their plans were inadequate. An oil spill plan should be prepared prior to leasing to determine the feasibility of controlling a spill in the Arctic environment. If there is any probability that a spill could not be contained (i.e. oil spilling out beneath the winter ice pack) then the area should not be leased.

The sociocultural discussion on pg. 23 is an example of an appropriate analysis summary; impacts are defined, quantified, duration identified, and adequately explained. All resources should be discussed to a similar level of detail in order to make an informed decision.

I don't understand how BOEMRE can make the following statement on pg. 16: "The BOEMRE concludes that new information regarding the Deepwater Horizon incident is not relevant." The cause of the Deepwater incident was insufficient attention paid to safety practices (or blatant disregard) by the operators and insufficient oversight by BOEMRE's predecessor (MMS), followed by not having a sufficient response plan in place and therefore an incompetent initial response. Regressing, this is exactly why best available technologies need to be identified and an oil spill response plan in place before even considering leasing.

The supplemental EIS fails to adequately analyze effects to ESA listed species instead relying on the following statement (pg. 20): "additional Section 7, ESA consultation would be required before BOEM approves any Development and Production Plan that could follow from a lease sale." A similar tactic is taken with non-listed marine and coastal birds on page 21: "As marine and coastal bird use presence is quite variable by season and location, an accurate assessment of impacts at this early stage is difficult. Additional NEPA and other environmental review processes occurring at later stages of the OCS Lands Act program (i.e. exploration, development and production) will have site-specific plans to focus an analysis. Significant adverse impacts to marine and coastal birds would be avoided and mitigated through restriction and measures implemented during those later review processes."

It is inappropriate not to analyze potential impacts related to the consumption/burning of the oil and natural gas produced from the lease sale area (pg. 16). I agree BOEMRE has no control over where the product resulting from the Chukchi leases is consumed and therefore cannot perform a site-specific effects analysis. However, BOEMRE should have a reasonable estimate of the amount of oil and gas that will be produced and consumed and therefore could calculate greenhouse gas emissions and contributions to global climate change. This is crucial given the Arctic environment of the proposed lease sale where climate change impacts have some of the greatest adverse effects; i.e. declining ice pack and resulting effects on marine mammals, shore erosion (including constructed islands for drill platforms and production), subsistence, pipelines and other infrastructure, etc.

As identified earlier, once leases are issued it is too late. Environmental effects of exploration, development, and production must be considered prior to leasing to make an informed decision. Leases are a binding contract which come with a right to develop; once a lease is issued, appropriate environmental mitigation may not be possible. It is not reasonable to presume that development of additional, site-specific mitigation measures during later environmental review processes would produce only minor impacts to Threatened and Endangered species. Mitigation measures must be identified and analyzed prior to leasing in order to make an informed decision. Leasing and development are connected actions, development impacts must be considered prior to leasing.

The EIS identifies that the community of Wainwright would like to use some of the produced gas (pg. 16). The EIS should have provided additional information on this issue, has a formal request by Wainwright been made? Are they in negotiation discussions with the potential producers? etc. From the information provided it is unclear whether Wainwright consuming a portion of the natural gas is reasonably foreseeable or not. If it is a reasonably foreseeable action resulting from the proposed lease sale, then BOEMRE is obligated under NEPA to analyze the environmental effects resulting from Wainwright's consumption. Similarly, a portion of the production is to be consumed to fuel the production operations. Would local natural gas burning have different local effects than consumption elsewhere? I do not know and the EIS certainly does not inform a potential decision maker.

Thomas E and Patricia Bills Comment

Differences between the alternatives should also be quantified, not merely generalized in terms of "greater or lesser", in order to make an informed decision. How much greater or lesser?

The Affected Environment section does a decent job about discussing recent and projected climate and meteorological changes (p. 32). Similar level of detail should be included in other sections of the Affected Environment such as physiography (p. 32) where increased shore erosion should be discussed as it would likely affect onshore pipelines, constructed islands, and other features of the oil and gas development.

I do not know much about ice gouging, but from the affected environment discussion (pg. 35) it sounds like it is an important issue. Therefore the site-specific surveys identified to be completed before decisions are made on specific proposed activities should be completed for sale area 193 prior to leasing.

The following sentence (pg. 36) is too subjective: "The main rivers that flow into the Arctic marine environment remain relatively unpolluted by human activities." Please define relatively. The sale area is off the coast of the National Petroleum Reserve, are the local rivers "relatively" unpolluted or do they contain more pollutants from the onshore development compared to Arctic rivers away from petroleum development?

Essential habitat is not known for the most sensitive early life stages of all three commercial fisheries species (p. 39). This is essential information to have before deciding to lease an area for oil and gas development. Surveys must be done of the lease area to determine if the species utilize the lease area in their early life stages. Unlike the boom and bust cycling of oil and gas development, commercial fishing done properly is a sustainable revenue source. Therefore an accurate analysis of the environmental and economic impacts to essential fish habitat and commercial fisheries is essential. Industry supporters tout the economic returns of oil and gas development, but the sustainable revenue of commercial fisheries is much more important. Leases should not be sold without this vital information. I find it interesting that in my situation the oil and gas companies and their supporters are advocating maximizing drilling opportunities in order to maximize economic returns while the state and affected counties place greater importance on ensuring that the fragile environment is adequately protected first allowing for the long-term sustainable economic benefits.

A generic significance threshold for biological resources of three generations or less for population recovery is too generic (pg. 60). For long lived species such as whales and other marine mammals three generations may be decades in length, this is much too long for recovery. It would also likely take several years, potentially generations, for population reductions related to oil and gas activities to become evident. Significance thresholds should be species or guild specific. A better measure may be use patterns. How does each species use the lease sale area and do they continue to use the same areas in the same fashion following leasing and during oil and gas activities? The threatened and endangered species thresholds (pg. 60) approach on what I'm proposing. One or more generations for recovery may be adequate for short-lived species but is still too long for long lived species especially if they are ESA listed.

Thomas E and Patricia Bills Comment

The development scenario (pg. 61) anticipates oil development to begin in 2020, 10 years from today. This is too long, too speculative, and therefore too risky. The natural gas discussion identifies the need for a transportation mechanism, without a defined transportation mechanism, the project is incomplete and should not be considered. Gas development and transportation to market are connected actions and must be considered together. BOEMRE must cancel the lease sale at least until a transportation pipeline proposal has been received so that the cumulative impacts of leasing, development, productions, and transportation can be analyzed together.

The development scenario description is not clear. Will drilling and production be accomplished from a single platform (pg. 62) within each lease? That is what the description seems to indicate, but how large are the lease parcels? what is the total number of lease parcels? and therefore what is the total number of platforms, wells, and pipeline length anticipated?

The ruptured pipeline risk is based upon the Gulf of Mexico (offshore) and U.S. Dept. of Transportation (onshore) regulations. These regulations were written for much different environments than the Chukchi Sea. I doubt these regulations are applicable to the harsh Arctic climate with its sub-zero temperatures, ice gouging, etc.

The Chapter 4 environmental analysis section provides no more detail than the summaries provided in Chapter 2. Most of the discussion is very generic with little detail mostly in subjective terms which are not defined. This EIS lacks sufficient information to make a reasoned informed decision.

In summary, please accept alternative 2 and cancel lease sale 193. The Arctic climate is too harsh and the ecosystem too fragile to risk another environmental catastrophe. It is too bad that the federal legislators and executive agencies do not have the political will power to adapt from preventable disasters such as the Exxon Valdez and the Deepwater Horizon. Ten years for production is too long, too speculative. America must move away from its dependence on carbon based energy, not prolong it. We have the capacity to embrace cleaner, renewable energy sources in the next decade. Ten years for production is too long and too speculative and is not worth the environmental risk.

The impacts to the local human environment (sociocultural systems, subsistence economy, and commercial fisheries), physical environment (air quality, water quality, and acoustic environment), and biological environment (essential fish habitat, marine mammals, marine and coastal birds, and ESA listed species) that are disclosed are too great and not worth the limited economic benefit from the proposed lease sale.

An EIS is required to provide sufficient information to make a reasoned, well informed decision; this EIS does not. Many of the impact analyses are considered too speculative and postponed until time of development, including ESA consultation. Waiting until development is too late, the impacts must be analyzed and disclosed prior to leasing. Leases are contracts, once issued, access must be granted, and development will occur. A complete environmental impact analysis must be conducted prior to leasing.

Thomas E and Patricia Bills Comment

The analyses that are included are too subjective; impact thresholds should be defined and quantified. For example, biological impacts are measured in terms of generations, but the EIS does not define the term or disclose how long generations are for the multitude of species affected. A generation for a bowhead whale is much longer than that of an Arctic fox; three generations for Arctic fox population recovery may be reasonable but three generations for bowhead whale (a subsistence resource and cultural foundation) recovery is certainly not. Basic biologic information such as what species are present within the lease sale area, during what times of the year, and at what population levels is lacking. Biologic inventories and surveys should have been completed, prior to initiating the EIS, to acquire the base information on which to support an EIS.

It is clear from this EIS that the federal offshore oil and gas regulations are as environmentally ineffective as those onshore. As the federal regulator, BOEMRE should apply the environmental safeguards that have been incorporated into federal coal permitting. Resource surveys are initiated several years prior to leasing to acquire the appropriate baseline information. The surveys continue through permitting and development to monitor impacts. Complete emergency response plans and reclamation plans are required prior to leasing. ESA consultation takes place during the lease analysis. Please incorporate these important steps so that BOEMRE has the appropriate and sufficient information upon which to base its decision.

We took our daughter to the Arctic coast to see wild polar bears, in 2007, when she was five years old. We would like her to have the ability to take her children there someday too. I'd like to go back also, not only to watch polar bears again but to observe the Inupiat bowhead whale hunt. Please cancel Chukchi Sea Lease Sale 193, the EIS is deficient and the limited economic benefit is not worth the foreseeable environmental impacts.

Sincerely,

Thomas E. and Patricia L. Bills
6 Chokecherry Lane
Buffalo, WY 82834
tbpdb@wyoming.com

From: NRDC [nrdcinfo@nrdconline.org] on behalf of B Bohlen [babsbohlen@comcast.net]
Sent: Monday, November 22, 2010 4:17 PM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

Nov 22, 2010

Mr. John Goll
Alaska Regional Office, 3801 Centerpoint Drive, Suite 500 Anchorage, AL 995035820

Dear Mr. Goll,

I urge the Bureau of Ocean Energy Management, Regulation and Enforcement to ensure that any decision on drilling in the Chukchi Sea be based on sound science and demonstrates how oil and gas activities can be conducted safely - especially in light of last summer's Deepwater Horizon blowout. The current draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193 completely dismisses the need to collect missing science and discounts potential negative impacts to polar bears, walrus, seals, whales and many other species already threatened by climate change.

I am concerned that the decision to release the draft SEIS in its current form may expedite oil drilling plans in the Chukchi Sea and could lead to permanently destructive consequences for the wildlife and Alaska Natives who depend on this region for survival.

In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process. In response to the court mandate, the Alaska regional office's draft SEIS made the unwise determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

The draft SEIS goes against the Obama Administration's commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed. The determination that we should drill at any cost undercuts sound science and environmental stewardship for our oceans.

Instead of proceeding with the current draft SEIS, your agency should first put a priority on collecting essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about whether and where to allow oil drilling in the Chukchi Sea.

Sincerely,

Ms. B Bohlen
3002 Whitefield Rd
Churchville, MD 21028-1308

From: Claude Bondy [akclaude2009@yahoo.com]
Sent: Tuesday, November 09, 2010 3:54 AM
To: BOEMRE AK Public Comments
Subject: OCS Lease Sale 193

Please consider this when making a decision:

- Lease Sale 193 should be affirmed as held in 2008. The SEIS provides sufficient information and analysis to support an informed decision affirming Sale 193.
- Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment.
- Sale 193 is critical to Alaska's future economy and the nation's long-term energy security.
- The Chukchi OCS is an important future source of U.S. energy supply with up to 29 billion barrels of oil and 209 trillion cubic feet of natural gas potentially in place. The Chukchi Sea is considered the most prospective unexplored offshore basin in the country.
- The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow.
- Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities.
- Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species.
- Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.
- There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today.
- The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas.
- According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than \$72 billion over the next 50 years.
- New offshore oil and gas development in Alaska would also generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance.
- Demand for energy is continuing to rise and the U.S. requires continued development of America's

1/11/2011

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November 24, 2010

Mr. John Goll
 Alaska Regional Director
 Bureau of Energy, Regulation and Enforcement
 3801 Centerpoint Dr. Suite 500
 Anchorage, Alaska 99503

Dr. Mr. Goll:
 Please, no drilling in the Chukchi Sea at all. No more oil spills. Save this area for the animals, the environment and the Alaskan natives.

Thank you for your consideration.
 Sincerely,



Mary Brown
 268 Bigelow Street
 Clayton, CA 94517

NOV 29

oil and gas resources as the nation transitions to the new energy sources of the future.
 • Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore.

Thanks,
 Claude & Jennifer Bondy (And Little Bob!)
 Alpine Creek Lodge
 PO Box 121
 Mile 68 Denali Highway
 Cantwell, Alaska 99729
 907-394-2552
 www.alpinecreeklodge.com

From: Delice Calcote [Dcalcote@mtaonline.net]
Sent: Monday, November 22, 2010 11:46 AM
To: BOEMRE AK Public Comments
Subject: Bring Science to the Arctic

Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic Ocean are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities. The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur. There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As the tragedy in the Gulf of Mexico taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences.

Please commit to making management decisions based on adequate science, not politics or profits. We must learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America's Arctic Ocean.

The oil spill in Valdez, the oil gusher in the Gulf of Mexico teach that oil cannot be cleaned up once it hits the ocean. Approximately 3% of the Gulf oil has been recovered according to news releases. This is totally unacceptable in oceans prone to seas of ice. There are no Coast Guard bases within an hour or two reach of the proposed Chukchi and Beafort seas extraction activity. Kodiak Coast Guard base is a couple days by ship to reach the North Seas, weather permitting. Haven't the days of the Whaling Ships caught in the sea ice a lesson to carry forward into todays plans. I'm not aware of anyone willing to go rescue anyone from a burning platform when there is a snow storm, ice storm, wind storm in the North seas. That would be called a suicide mission in my book. The oil would go to the bottom, it would travel in layers of currents, and where it would show up could have devastating effects on marine life in many areas of the North Seas.

There are children that are not able to return to their Villages on the North Slope as the air is toxic to their lungs. The flaring that is allowed to continue day and night has had devastating consequences on the lungs of elders, parents, youth and babies. No one is immune to the toxins being burned into the air...with no unit of scrubbers to assure that nothing is escaping into the air. This is called genocide, killing off communities of First Nations and peoples, either one by one or by mass poisoning of the air

1/11/2011

which eventually is in the tundra and water resources. The toxins in the air must be affecting the marine and other cell life on the North Slope construction and extraction areas. Where are those studies? The EVOS studies seems to be missing from all the explosions and leaks over the years on the Alyeska Pipeline and drilling units spread across the North Slope traditional lands and territories.

The Clean Water ACT and the Clean Air ACT charge the government with a Public Trust Doctrine and a Tribal Trust Doctrine. It is a shame that the Tribal Governments are spending very limited and cherished resources on going into the United States Courts to force the federal and state governments to uphold the laws and sacred duties to protect and promote our full rights that are acknowledged in the 1945 United Nations Charter Article 73, Resolution 66(I) et al.

Thank you for your time and attention on this matter.

I reserve and preserve all my rights.

Delice Calcote
 Natural woman and grandmother of Afognak Island and
 I remain and claim the non-treaty status of Alaska's
 First Nations and peoples.

Delice Calcote
 Anchorage, AK

1/11/2011

Regional Director, Alaska OCS Bureau
 Bureau of Ocean Energy Management, Regulation and Enforcement
 3801 Centerpoint Drive, Suite 500
 Anchorage, Alaska 99503-5820
 ("Attn: Chukchi Sea Draft SEIS")

According to a University of Alaska study, new OCS production in Alaska would provide an annual average of 35,000 jobs in Alaska with a total payroll of more than \$72 billion over the next 50 years. I support OCS drilling and production in Alaska.

*Fred Capelle Jr.
 Fred Capelle Jr.
 1749 Broadway rd #A
 North Pole, AK 99705
 907-799-1839*



November 22, 2010

Bureau of Ocean Energy Management, Regulation and Enforcement
 Alaska OCS Region
 3801 Centerpoint Drive, Suite 500
 Draft SEIS Chukchi Sea Lease Sale 193
 Anchorage, AK 99503-5820

RE: Draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193

Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic Ocean are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities.

The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur.

There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As the tragedy in the Gulf of Mexico taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences.

Frozen Arctic seas. Subzero temperatures. Massive waves. Over 1,000 miles away from the closest Coast Guard response center. These harsh inhospitable conditions are what make the Chukchi Sea perfect for polar bears, whales, walruses, seals, and other Arctic marine animals that call it home. These same conditions are also a recipe for disaster in the inevitable event of an offshore drilling accident.

Please commit to making management decisions based on adequate science, not politics or profits. We must learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America's Arctic Ocean.

J. Capozzelli
 315 West 90th Street
 New York, NY 10024

NOV 29

November 10, 2010

Alaska Bureau of Ocean Energy, Management, Regulation, and Enforcement
3801 Centerpoint Drive
Suite 500
Anchorage, AK 99503

RE: Chukchi Sea Draft SEIS

I am writing because the recent draft supplemental environmental impact statement for the Chukchi Sea Lease Sale 193 is an unnecessarily hurried attempt to paper over, rather than obtain, essential missing information about the Chukchi Sea. The Bureau readily admits that without missing information about the basic ecology of the area, it is in many cases not possible to judge the impacts of oil and gas activities resulting from the lease sale.

Nevertheless, the Bureau has determined in its draft supplement that it will obtain none of the missing information before making its leasing decision. This decision is unsupportable and irresponsible.

The draft supplement fails to assess the true impacts of oil and gas drilling and other lease activities in this fragile region. Simply stating that the agency does not know the impacts is not acceptable. For example, a catastrophic oil spill in the harsh, remote waters of the Arctic Ocean will devastate that region. Twenty-foot ocean swells, frozen seas, subzero temperatures and a lack of infrastructure will make an oil spill nearly impossible to clean up.

The Bureau also must more meaningfully assess the potential impacts of natural gas development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development alone is not enough.

The Bureau's actions here represent a business-as-usual approach to rush through Arctic offshore oil leasing even in light of the major failures at the agency recently brought to light by the Gulf spill. There should not be a rush to lease the Chukchi Sea and open it to oil and gas drilling. As the Gulf spill has taught us, allowing oil and gas development in the offshore before fully analyzing and preparing for its potential impacts can have tragic and irreversible consequences.

Just five months ago, an oil spill erupted in the Gulf of Mexico, dumping millions of gallons of oil into ocean waters. Government officials are still piecing the puzzle together to determine the systemic failures that led to the spill and to ensure a spill like the Deepwater Horizon never happens again. But even though those studies have not been completed, the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), is moving forward with oil and gas drilling in the Arctic Ocean as if the spill had never occurred.

This summer, a Federal court directed BOEMRE to redo its analysis of the environmental impacts of a massive Bush-era oil and gas lease sale in the Chukchi Sea off the northwest coast of Alaska. But just two months later, BOEMRE has now issued a draft document that leaves unanswered hundreds of questions about the impacts of drilling in the Arctic Ocean and the potential threat of a spill in those waters.

I urge you to ensure that decisions about Chukchi Sea Lease Sale 193 are made with adequate scientific information and analysis. President Obama has made a commitment to policy decision-making that relies on science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic Ocean drilling before you proceed with Lease Sale 193.

Please rely on sound science and learn from mistakes made in the Gulf before you allow oil and gas leasing in the fragile waters of America's Arctic Ocean. Thank you for your help.

Yours truly,
J. Capozzelli
New York



November 12, 2010

Mr. John Goll, OCS Director
BOEMRE Alaska
3801 Centerpoint Drive
Anchorage, AK 99503

RE: Chukchi Sea Draft SEIS

I am writing to urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife.

The current draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193 dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife.

On October 12, the Alaska region BOEMRE released the draft SEIS in response to a June ruling by the Alaska District Court that their environmental analysis was inadequate. In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process.

In response to the court mandate, the Alaska regional office's draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

Alaska's BOEMRE's decision to release the draft SEIS goes against the Obama administration's commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed.

It also seems to directly disregard Secretary Salazar's September statement that "we must be thoughtful and responsible in developing... [Alaska's] resources so that we protect Alaska's fisheries, wildlife, and remarkable beauty for generations to come... In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward."

In determining that we should accept any cost for drilling, the draft SEIS undercuts sound environmental stewardship and decision making for our oceans.

Instead of proceeding with the current draft SEIS, the agency should first put a priority on collecting essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

Thank you for considering my comments in this important matter.

R. Capozzelli
R. Capozzelli
Yonkers, New York



Page 1 of 1

Jefferson Childs Comment

From: Jefferson Childs [Oceanauts@gci.net]
Sent: Monday, November 29, 2010 8:10 PM
To: BOEMRE AK Public Comments
Cc: 'Jeff Ruch'
Subject: Attn: Chukchi Sea Draft SEIS
Attachments: Chukchi Sea Draft SEIS Comments_JChilds.pdf

I've quickly reviewed BOEMRE's Chukchi Sea Draft SEIS; Please find attached are my comments (in pdf) for BOEMRE's consideration for improving the SEIS. Because of past problems I've experienced with MMS, please note I am cc'ing PEER with these comments. Should BOEMRE have questions regarding my SEIS comments, BOEMRE may contact me via my email below.

Cheers,
Jeff Childs
Marine Wildlife Ecologist
Anchorage, Alaska
Oceanauts@gci.net

Jefferson Childs Comment

Jeff Childs – LS 193 Draft SEIS Comments

After quickly reviewing BOEMRE's Chukchi Sea Draft SEIS and parts of the Lease Sale 193 EIS from which it is tiered, I note the following deficiencies, analytical flaws, and noncompliance with federal regulations:

1. Incomplete Analysis of Gas Development Activities
 - a. Section IV.B.5. discusses the potential for an (accidental) natural gas release, citing loss of well control or ruptured pipeline as potential sources in offshore waters. BOEMRE, in describing the scenario of potential natural gas release from a ruptured pipeline, states "Offshore, from a subsea pipeline release, the gas would bubble to the surface and continue into the atmosphere, where it would dissipate." The scenario and subsequent analyses, do not consider what would happen if natural gas was released during colder months when the sea surface is covered with ice! Natural gas released during colder months when ice covers the Chukchi Sea would not necessarily "bubble to the surface and continue into the atmosphere, where it would dissipate." (DSEIS IV.B.5.; p. 67). It is more likely to become trapped beneath the sea surface-ice interface, where juvenile arctic cod, ice seals, beluga whales, and bowhead whales may breathe in pockets of trapped natural gas. BOEMRE describes the fate of a gas release thusly (p. 68):

"The primary component of natural gas is methane, a colorless, odorless, and tasteless gas. It is not toxic in the atmosphere, but is classified as a simple asphyxiate, possessing an inhalation hazard. As with all gases, if inhaled in high enough concentration, oxygen deficiency could occur and result in suffocation. The specific gravity of methane is 0.58. Being lighter than air it has the tendency to rise and dissipate into the atmosphere."

The impact analysis is incomplete until BOEMRE analyzes the impacts of natural gas trapped beneath sea ice on pagophilic species such as the bowhead whale, beluga whale, ice seals, and arctic cod. Please note that contaminated breathing gases can be serious; (human) divers breathing contaminated breathing gases have passed out and/or died. We might anticipate similar lethal or sublethal impacts to pagophilic species breathing natural gas trapped beneath the sea ice. Further expanded analysis would also consider possible escapement of trapped natural gas at breathing holes used by ice seals or visited by hunting polar bears.

- b. There are a number of rare fish species documented occurring in the Chukchi Sea Planning Area; some species are known only based on one or several specimens collected in the Planning Area. Data available in Mecklenburg et. al. (2002) indicates such species are demersal in nature. BOEMRE has not conducted an analysis investigating adverse impacts associated with leasing blocks where rare fish species occur (i.e., have been collected). Without doing the analysis for BOEMRE, consider the impacts associated with leasing a block where an endemic demersal fish was collected in the Chukchi Sea Planning Area; the only known site in all of Alaska's waters. What is the population size and distribution of the

Jefferson Childs Comment

species? What are the habitat parameters? What impacts might occur should BOEMRE allow exploratory drilling, installation of a production platform, or trenching of a pipeline through the only known area where the species was collected in the Chukchi Sea? What impacts might there be if there are two separate sites where a rare demersal species are known to occur in the leasing area? Consideration of such rare animals, their distributions, abundance, and habitat requirements are necessary to avoid extirpating them from the region. BOEMRE should conduct an analysis, block by block, in the Chukchi Sea Planning Area, for rare fish occurrences, and consider potential impacts to these fish species. In fact, consider removing lease blocks where rare fish are documented occurring from past surveys, from the lease sale (of course, this may involve generating a new Alternative in the SEIS).

2. Incomplete Analysis of Oil & Gas Leasing Activities (LS 193 EIS & DSEIS)

- a. The MMS noted the following in its LS 193 EIS: "While we expect no regionwide losses to fish resources at the population level,..." However, MMS did not perform a thorough analysis since there exists potentially significant impacts to rare fish species in the Chukchi Sea Lease Sale 193 area. As noted above in 1.b., BOEMRE need analyze leasing blocks inhabited by rare fish species, where impacts of placing exploratory drilling operations, production platforms, seafloor structures, and pipelines may result in the only known regional population occurs. For example, construction activities on the seafloor in areas where a rare marine fish species inhabits may adversely threaten their population or habitat leading to their extirpation from the Planning Area. MMS-Alaska Region (now BOEMRE-Alaska Region) has previously been advised to analyze offshore oil & gas industry activity impacts on rare marine fish species in the Beaufort and Chukchi seas, though the agency managers chose to disregard such concerns expressed by their agency subject matter expert (me, at the time)!
- b. The former MMS-Alaska Region notes the potential for significant adverse impacts to some local fish populations, but assumes impacted local fish populations would recover due to recruitment from adjacent fish populations. In the scientific arena, this is metapopulation ecology, and BOEMRE needs more information to accurately assume/assess such recruitment recovery. In instances that BOEMRE finds significant adverse impacts to local populations, it is then necessary for them to conduct a metapopulation analysis that examines "source/sink" population relationships, pathways of recruitment (as well as barriers), availability of habitats, and importantly, abundances of adjacent populations! Without considering such parameters and conducting a detailed metapopulation analysis, they are left with flawed assumptions of recovery.

3. Incomplete and Inconsistent Use of New Information in the SEIS

- a. There are many newly published scientific reports and peer-reviewed scientific papers available with new information relevant to lease sale activities in the Chukchi Sea Planning Area and the environmental analyses of the Lease Sale 193 EIS and this DSEIS. Much of this newly published information (since 2007) comes from NOAA, USGS, faculty of the University of Alaska-Fairbanks, and even BOEMRE. Additionally, the Oil & Gas Industry (e.g., SEPCO, Conoco-Phillips) have published recent reports of offshore surveys or monitoring efforts in

Jefferson Childs Comment

the Chukchi Sea Planning Area. The DSEIS does not cite or consider such newly published information, including some studies funded or published by BOEMRE! Moreover, the BOEMRE-Alaska Region has a number of ongoing studies that it receives progress reports on; these ongoing studies and progress reports are not considered in the DSEIS environmental analyses. It's striking and embarrassing that BOEMRE would prepare an SEIS that does not make better use of newly available scientific information (e.g., published since 2007), in light of recent transgressions at the MMS. At the end of my comments, I've provided a partial list of newly published studies that BOEMRE should examine and incorporate in their environmental analyses for the SEIS and future lease sale analyses!

4. Underestimating the Importance of Incomplete or Missing Information

- a. BOEMRE underestimates the importance of incomplete or missing information in the Lease Sale 193 EIS and DSEIS (see pp 8 -15 of 143; Appdx A of DSEIS). BOEMRE (in the DSEIS) often uses "canned" statements dismissing why incomplete or missing information is not essential to making a reasoned choice regarding the Alternatives considered in the EIS. However, there are many gaps in knowledge regarding the distribution, abundance, ecology and behavior of many fish resources, (particularly so for some rare demersal fish species) occurring in the Chukchi Sea Planning Area, that with more thorough analysis (not done in the LS 193 EIS) suggest significant adverse impacts may occur if certain lease blocks are made available to or modified by offshore oil and gas activities. As noted earlier, some rare fish species are known occurring in the Lease Sale area from one to several locations, and only by one to several specimens! One rare species is endemic to the eastern Chukchi Sea! As such, the best available information suggests these animals are concentrated where collected and may represent one or several populations in the region (at least without further information). Should BOEMRE lease a block for offshore oil & gas exploration and development where the only known population of a rare fish species occurs in the region (or say one of two locations), industry activities pose a substantial threat to that population or its habitat and may inadvertently extirpate the population via normal or accidental activities (e.g., exploratory drilling, installation of production platform or trenching of a pipeline). BOEMRE has NOT done the requisite hard look at how leasing such blocks to industry may adversely impact such rare fish species. Such lease sale blocks should not be leaseable or their seafloors modified (e.g. via pipeline right-of-ways) unless more information is gathered indicating the species (1) has more populations in the Chukchi Sea Planning Area, (2) is more abundant than previous data indicate, (3) a broader distribution than several point sampling sites, and (4) known habitat requirements are not unique to that block. Indeed, the BOEMRE needs much more information than it currently has to confidently determine that its leasing activities will NOT cause a significant adverse impact to a rare fish species/population, such as extirpating it from the planning area.

5. Noncompliant Listing of Preparers.

- a. Chapter VI.D. Authors, Reviewers, and Supporting Staff (p.122) does not comply with and fulfill CEQ Regulations (Section Sec. 1502.17) (List of preparers). These regulations specify:

Jefferson Childs Comment

"The environmental impact statement shall list the names, together with their qualifications (expertise, experience, professional disciplines), of the persons who were primarily responsible for preparing the environmental impact statement or significant background papers, including basic components of the statement (Secs. 1502.6 and 1502.8). Where possible the persons who are responsible for a particular analysis, including analyses in background papers, shall be identified. Normally the list will not exceed two pages."

There is good reason to properly comply with CEQ Regulations Sec. 1502.17, chiefly that the public and decision-makers should know who conducted and authored the environmental analyses for various resources, and what their qualifications are making them experts suitable for conducting such analyses. Whereas BOEMRE's Alaska Region has not been forthright concerning some past scientific/environmental analyses conducted by agency subject matter experts in lease sale EA's/EIS's, the public has good reason for continued distrust of BOEMRE's NEPA documents. The public should be confident that, for example, the agency expert conducting and writing water quality impact assessment is indeed a water quality expert. Similarly, BOEMRE should demonstrate that a person responsible for a particular analysis (e.g., Arctic marine mammals) has the expertise and experiences regarding Arctic marine mammals, instead of, say, Gulf of Mexico marine mammals. Finally, I recommend specifying each person's experience with offshore oil & gas activities, to give the public an accurate picture of what their expertise and experiences are concerning the industry activities they are tasked with analyzing, writing, or reviewing information on. I mention this in light of the fact that no analyst discussed or analyzed the impacts of a pipeline gas release during colder months when ice covers the Chukchi Sea, and a natural gas leak is more likely to become trapped under ice than bubble to the surface and dissipate into the atmosphere.

- b. As an example, I suggest providing the requisite information for each author, reviewer, and supporting staff person along these lines:

John Doe, Wildlife Biologist, PhD., Univ. of Alaska-Fairbanks, Wildlife Ecology (2007). M.S., Univ. of Washington, Zoology (1999). B.S., Oregon State Univ., Biology (1996). John recently joined BOEMRE-Alaska Region (2007), after having completed his dissertation investigating polar bear denning behavior along the Beaufort and Chukchi Sea coasts. John authored all sections of the FEIS concerning polar bears, non-listed marine mammals, and terrestrial mammals. John's has limited experience with the offshore oil & gas industry, having one day toured the NorthStar facility off the North Slope.

A Sample List of Newly Published Information BOEMRE Should Consider in the DSEIS.

Jefferson Childs Comment

Arp, C.D., et al. 2010. Two mechanisms of aquatic and terrestrial habitat change along an Alaskan arctic coastline. Springer Berlin / Heidelberg, 0722-4060, 12 p.
<http://www.springerlink.com/content/6454720773312h86/fulltext.pdf>

Bluhm, B.A. et al. 2007. High gray whale relative abundances associated with an oceanographic front in the south-central Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography 54(23-26): 2919-2933.

Douglas, D.C., 2010. Arctic sea ice decline: Projected changes in timing and extent of sea ice in the Bering and Chukchi Seas: U.S. Geological Survey Open-File Report 2010-1176, 32 p.

Durner, G. M., et al. 2009. Predicting the 21st century distribution of polar bear habitat from general circulation model projections of sea ice. Ecol. Monogr. 79(1):25-58

Fischbach, A.S., Monson, D.H., and Jay, C.V., 2009. Enumeration of Pacific walrus carcasses on beaches of the Chukchi Sea in Alaska following a mortality event, September 2009: U.S. Geological Survey Open-File Report 2009-1291, 10 p.

KONDZELA, C., M. GARVIN, R. RILEY, J. MURPHY, J. MOSS, S. A. FULLER, and A. GHARRETT. 2009. Preliminary genetic analysis of juvenile chum salmon from the Chukchi Sea and Bering Strait. N. Pac. Anadr. Fish Comm. Bull. 5:25-27. (.pdf, 505 KB).
[http://www.npafc.org/new/publications/Bulletin/Bulletin%20No.%205/NPAFC_Bull_5_025-027\(Kondzela\).pdf](http://www.npafc.org/new/publications/Bulletin/Bulletin%20No.%205/NPAFC_Bull_5_025-027(Kondzela).pdf)

MOCKLIN, J. A. 2009. Evidence of bowhead whale feeding behavior from aerial photography. AFSC Processed Rep. 2009-06, 118 p. Alaska Fish. Sci. Cent., Natl. Mar. Fish. Serv., NOAA, 7600 Sand Point Way NE, Seattle WA 98115. (.pdf, 7.25 MB). <http://www.afsc.noaa.gov/Publications/ProcRpt/PR2009-06.pdf>

MOSS, J. H., J. M. MURPHY, E. V. FARLEY, JR., L. B. EISNER, and A. G. ANDREWS. 2009. Juvenile pink and chum salmon distribution, diet, and growth in the northern Bering and Chukchi seas. N. Pac. Anadr. Fish Comm. Bull. 5:191-196. (.pdf, 1.23 MB).
[http://www.npafc.org/new/publications/Bulletin/Bulletin%20No.%205/NPAFC_Bull_5_191-196\(Moss\).pdf](http://www.npafc.org/new/publications/Bulletin/Bulletin%20No.%205/NPAFC_Bull_5_191-196(Moss).pdf)

Norcross, B.L. et al. 2010. Demersal and larval fish assemblages in the Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography 57(1-2): 57-70.

OCS Study MMS 2009-063. Final Report. Traditional Knowledge Regarding Bowhead Whales in the Chukchi Sea near Wainwright, Alaska. January 2010.

OCS Study BOEMRE 2010-033. Final Report. Satellite Tracking of Western Arctic Bowhead Whales. July 2010.

Oppel, S. et al. 2010. International importance of the eastern Chukchi Sea as a staging area for migrating king eiders. Polar Biol. 32(5):775-783.

Quakenbush, L.T. et al. 2010. Fall and winter movements of bowhead whales (*Balaena mysticetus*) in the Chukchi Sea and within a potential petroleum development area. Arctic 63(3):289-307.

Jefferson Childs Comment

RUGH, D. J., W. R. KOSKI, J. C. GEORGE, and J. E. ZEH. 2008. Interyear re-identifications of bowhead whales during their spring migration past Point Barrow, Alaska, 1984-1994. *J. Cetacean Res. Manage.* 10:195-20.

SCHWEDER, T., D. SADYKOVA, D. RUGH, and W. KOSKI. 2010. Population estimates from aerial photographic surveys of naturally and variably marked bowhead whales. *J. Agric. Biol. Environ. Stat.* 15:1-19.

STREEVER, B., R. P. ANGLISS, R. SUYDAM, M. AHMAOGAK, C. BAILEY, S. B. BLACKWELL, J. C. GEORGE, C. R. GREENE, Jr., R. S. JAKUBCZAK, J. LEFEVRE, T. L. McDONALD, T. NAPAGEAK, and W. J. RICHARDSON. 2008. Progress through collaboration: a case study examining effects of industrial sounds on bowhead whales. *Bioacoustics* 17:345-347.

See also the various ongoing studies BOEMRE is funding at:

Alaska Environmental Studies Ongoing Program. November 2010.
http://alaska.boemre.gov/ess/ongoingStudies/Ongoing_studies.pdf

Additional Literature Cited

Mecklenburg, C.W., T.A. Mecklenburg, and L.K. Thorsteinson. 2002. *Fishes of Alaska*. Bethesda, MD: American Fisheries Society.

Comments Prepared and Submitted by: Jeff Childs, Marine Wildlife Ecologist, P.O.B. 111406, Anchorage, AK 99511, Oceanauts@gci.net

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Oil and gas production resulting from Sale 193 will occur under the world's highest safety and environmental standards. Activities will be governed by stringent lease stipulations identified in the FEIS and SEIS. Numerous mitigation measures, including seasonal operating restrictions, will minimize potential impacts, and conflicts avoidance mechanisms will protect subsistence whaling and other harvest activities. I support OCS production in Alaska.

DEAN MACY COLBRAY
Dean Macy Colbray
105 E ST
FAIRBANKS AK 99707



November 19, 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Subject: Stop Arctic Drilling from Harming Polar Bears

To whom it may concern:

The Arctic is already in trouble. The ecosystems have been weakened by climate warming, making them very vulnerable and stressed; we know this much about the Chukchi Sea ecosystem. However, even the U.S. government admits that there is little more known about the Arctic species and the effects of offshore oil and gas on them. So it doesn't make sense to begin offshore drilling in the Arctic if organisms there are already on the brink of extinction, drilling could make it worse—we simply don't know.

The problems of drilling have already been made widely known, especially in light of the recent BP oil spill in the Gulf of Mexico. If anything near that scale happened in the Arctic, we would see a large rise in number of extinctions in the North. In the Arctic Ocean, there would be no way to clean up the oil. No huge number of volunteers could be mobilized to the North to help, which could determine the survival or extinction of species. And this is only one of the risks of offshore drilling.

The presence of machinery and humans in the North could do a lot of damage to Chukchi species. Scientists simply don't know enough about the ecosystems to know fully understand the impacts of offshore drilling. Therefore, it only makes sense for drilling to wait until we have better knowledge of the Chukchi Region, a better plan in case of disaster, and a way to make sure our fragile ecosystems aren't hurt in the process. Please take this into consideration as you decide whether drilling should commence in the Arctic.

Sincerely,

Melissa Connolly

Melissa Connolly
Whippany Park Science Environmental Education Klub (SEEK)
165 Whippany Road
Whippany, NJ 07981



From: gadaily@gmail.com
Sent: Tuesday, November 09, 2010 5:19 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

G Allen Daily
4119 N 110th St
Wauwatosa, WI 53222-1104

November 9, 2010

John Goll
OCS Director, BOEMRE Alaska

Dear John Goll:

I urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife. The current draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193 dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife.

On October 12, the Alaska region BOEMRE released the draft SEIS in response to a June ruling by the Alaska District Court that their environmental analysis was inadequate. In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process. In response to the court mandate, the Alaska regional office's draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

Alaska's BOEMRE's decision to release the draft SEIS goes against the Obama administration's commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed. Furthermore, it seems to directly disregard Secretary Salazar's September statement that "we must be thoughtful and responsible in developing... [Alaska's] resources so that we protect Alaska's fisheries, wildlife, and remarkable beauty for generations to come... In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward."

In determining that we should accept any cost for drilling, the draft SEIS undercuts sound environmental stewardship and decision making for our oceans.

Instead of proceeding with the current draft SEIS, your agency should first put a priority on collecting essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

Thank you for considering my comments.

Sincerely,

G Allen Daily
4145730572

From: regis.digiacom@marquette.edu
Sent: Monday, November 22, 2010 8:09 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

John Goll
OCS Director
BOEMRE Alaska
November 22, 2010

Dear John Goll, OCS Director, BOEMRE Alaska,

The Bureau of Ocean Energy Management, Regulation and Enforcement should not move forward with any oil drilling plans for the Chukchi Sea until all necessary science is collected and lessons are learned from the BP oil disaster.

The current draft SEIS for Chukchi Sea Lease 193 does not sufficiently address the risks to the Arctic Ocean's ecosystem. It is critical that all necessary science is collected and the BP oil spill is analyzed and incorporated into any decisions dealing with oil drilling in the Chukchi Sea.

It is imperative that all necessary steps are taken to prevent another catastrophic oil spill from happening.

Sincerely,

Regis DiGiacomo
2333 N. 113th St.
Wauwatosa, WI 53226

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

New offshore oil and gas development in Alaska would generate thousands of new high-paying jobs throughout all 50 states – in manufacturing, computer technology, construction and maintenance. I support OCS drilling and production in Alaska.

Over the last four years Shell has dedicated a great deal of resources to acquiring 3D seismic data and baseline science near its Chukchi and Beaufort leases. Shell dominated the largest lease sale in Alaska history and the second most successful oil and gas lease sale in the history of the nation, picking up 275 lease blocks in the Chukchi Sea for \$2.1 billion. Shell pioneered the Cook Inlet and throughout the 1980s and early 1990s, drilled the majority of the exploratory wells in the Alaska OCS - including wells in the Beaufort and Chukchi seas as well as the St. George Basin, Bering Sea and the Gulf of Alaska. Shell's exploration program in the Beaufort led to the Northstar and Liberty fields. I support development of OCS production in Alaska.

Dale H. Donaldson
Dale H. Donaldson

Scott Erickson
Scott Erickson
304 Slater Dr.
Fairbanks AK. 99701
907-322-7268

212 16th AVE
Fairbanks AK
99701
Phone 907-451-8904
e Phone 907-2327

RECEIVED
NOV 24 2010

REGIONAL DIRECTOR, ALASKA OCS BUREAU
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT
3801 CENTERPOINT DRIVE, SUITE 500
ANCHORAGE, ALASKA 99503-5820

RECEIVED
NOV 24 2010

REGIONAL DIRECTOR, ALASKA OCS BUREAU
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT
3801 CENTERPOINT DRIVE, SUITE 500
ANCHORAGE, ALASKA 99503-5820

Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management
Regulation and Enforcement
3801 Centerpoint Drive
Suite 500
Anchorage, Alaska 99503-5820.

Attn: Chukchi Sea Draft SEIS

Dear Bureau of Ocean Energy, Management, Regulation, and Enforcement,

Your recent draft supplemental environmental impact statement for the Chukchi Sea Lease Sale 193 is an unnecessarily hurried attempt to paper over, rather than obtain, essential missing information about the Chukchi Sea. The Bureau readily admits that without missing information about the basic ecology of the area, it is in many cases not possible to judge the impacts of oil and gas activities resulting from the lease sale. Nevertheless, the Bureau has determined in its draft supplement that it will obtain none of the missing information before making its leasing decision. This decision is unsupportable.

The draft supplement utterly fails to assess the true impacts of oil and gas drilling and other lease activities in this fragile region. Simply stating that the agency does not know the impacts is not acceptable. For example, a catastrophic oil spill in the harsh, remote waters of the Arctic Ocean will devastate that region. Twenty-foot ocean swells, frozen seas, subzero temperatures and a lack of infrastructure will make an oil spill nearly impossible to clean up.

The Bureau also must more meaningfully assess the potential impacts of natural gas development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development alone is not enough.

The Bureau's actions here represent a business-as-usual approach to rush through Arctic offshore oil leasing even in light of the major failures at the agency recently brought to light by the Gulf spill. There should not be a rush to lease the Chukchi Sea and open it to oil and gas drilling. As the Gulf spill has taught us, allowing oil and gas development in the offshore before fully analyzing and preparing for its potential impacts can have tragic and irreversible consequences.

I urge you to ensure that decisions about Chukchi Sea Lease Sale 193 are made with adequate scientific information and analysis. President Obama has made a commitment to policy decision-making that relies on science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic Ocean drilling before you proceed with Lease Sale 193.

Please rely on sound science and learn from mistakes made in the Gulf before you allow oil and gas leasing in the fragile waters of America's Arctic Ocean.

Sincerely,

Christine Favilla
P.O. Box 25
Elsah, IL 62028-0025
United States



November, 23 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment – Support Access to Alaska's OCS Oil and Gas Resources

Dear Mr. Goll,

I'm writing to express my full support of oil and gas development of Lease Sale 193 in Alaska's Chukchi Sea.

Many barrels of oil and gas has been successfully and safely harvested from the North Atlantic providing jobs for locals and funds for the Government with little or any disruption to the local environment. Developing the Chukchi Sea oil and gas reserves will provide the next generation necessary resources to meet the challenges they will inevitably face without taking unnecessary environmental risks. Boosting oil and gas development in Alaska is a way to improve economic conditions all over our country during a time when our country is struggling to keep everyday Americans' heads above water financially. Local oil and gas development reduces our trade deficit, creates jobs in America and puts money into local, state and federal treasuries.

There is no better time to start fixing America's financial troubles by putting ourselves to work. I believe that the federal government should move forward with the process of developing Lease Sale 193.

Sincerely,

Bradley J. Fluetsch, CFA

5730 North Douglas Hwy, Ste. B
Juneau, AK 99801
(907) 523-1029
bjf@gei.net

November, 23 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment – Support Access to Alaska's OCS Oil and Gas Resources

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There is no better time to start fixing America's financial troubles by putting ourselves to work. I believe that the federal government should move forward with the process of developing Lease Sale 193.

Sincerely,

Bradley J. Fluetsch, CFA
5730 North Douglas Hwy, Ste. B
Juneau, AK 99801
(907) 523-1029
bjf@gei.net

Representative of Form Letter Comment

November 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM)
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

ATTN: Chukchi Sea Draft SEIS Comment – Support Access to Alaska's OCS Oil and Gas Resources

Dear Mr. Goll:

I write in support of oil and gas development enabled by Lease Sale 193 in the Chukchi Sea and the draft Supplemental Environmental Impact Statement (SEIS) recently released by your agency to address concerns expressed by the U.S. District Court in Alaska.

The federal government should expedite development of Alaska's vast oil and natural gas reserves to support America's economic recovery. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new Alaska offshore energy production could produce an annual average of 35,000 jobs over the next 50 years for the state of Alaska alone, with a total payroll of \$7.2 billion.

I urge the federal government to move forward with a robust development of Lease Sale 193 in the Chukchi Sea (and similar development of the Beaufort Sea), and to provide Alaska with revenue-sharing benefits. The public interest requires you to promote such a policy that encourages job creation, supports national security while growing the economy and providing the nation with much needed domestic energy supplies and less dependence on foreign energy imports.

Sincerely,

Name: Tony Follett
Address: 2014 Merrill Field Dr. City: Anchorage State: AK Zip: 99501

Email: afollett@acrometric.com References: <http://www.boemre.gov/oez/press/2010/press1012.htm> - and -
http://www.northermaspipelines.com/sites/default/files/makesfile/ISER_UAA_economicanalysisoffshoredevelopment.pdf

Representative of Form Letter Comment

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RECEIVED
NOV 29 2010

REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

From: Defenders of Wildlife [defenders@mail.defenders.org] on behalf of Heidi Grassberger [hgras99@yahoo.com]
Sent: Monday, November 22, 2010 2:42 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

Nov 22, 2010

Regional Director Alaska OCS Region Bureau of Ocean Energy Management, Regulation and Enforcement

Dear Regional Director Bureau of Ocean Energy Management, Regulation and Enforcement,
As someone who cares about wildlife, I am deeply concerned about the Draft Supplemental Environmental Impact Statement for Chukchi Sea Lease Sale 193.

Drilling in the Chukchi could be disastrous for the wildlife that depends on the Chukchi to survive.

There is still no effective, proven technology to clean up oil spills in broken sea ice conditions in Arctic waters such as those found in the Chukchi Sea.

Oil can coat polar bear fur, causing even these Arctic sea-ice dwellers to freeze to death. And increased drilling activities can disrupt the feeding habits of walrus, seals and other animals that depend on the sea ice of the Chukchi to hunt and survive.

Because the risks to wildlife are so great, I urge your agency to await the results of the President's Spill Commission, due out in January, and a U.S. Geological Survey analysis of the Arctic, due out in April.

Once that critical information is in hand, then the agency should put out a new Draft Environmental Impact Statement for public comment. We simply should not move forward with drilling in this fragile environment until we have collected and fully analyzed all relevant information.

Thank you for considering my comments.

Sincerely

Ms. Heidi Grassberger
1565 N 117th St
Wauwatosa, WI 53226-3207

From: World Wildlife Fund [ecomments@wwfus.org] on behalf of Heidi Grassberger [hgras99@yahoo.com]
Sent: Sunday, November 21, 2010 8:11 AM
To: BOEMRE AK Public Comments
Subject: Urgent Action Needed: Protect the Arctic's Chukchi Sea for People and Wildlife

Nov 21, 2010

Regional Director, Alaska OCS Region, BOEMRE John Goll
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503

Dear Regional Director, Alaska OCS Region, BOEMRE Goll,

The draft Supplemental Environmental Impact Statement (SEIS) for the Chukchi Sea Lease Sale 193 represents a rushed decision by the Alaska Region of BOEMRE to ignore, rather than obtain, essential missing information about the Chukchi Sea.

The draft SEIS acknowledges that, without the missing information about the basic ecology of the area, it may not be possible to judge the impacts of oil and gas activities resulting from the lease sale. Yet BOEMRE has determined that it will obtain none of the missing information before allowing activity on the leases, including drilling, to go forward.

The decision undercuts sound environmental stewardship and decision making for our oceans. It goes against the administration's commitment to science-based decision making, especially in light of the systemic failures made evident by the Gulf of Mexico accident.

BOEMRE should prioritize the collection of essential missing information. This information should be based, in part, on the data generated by the U.S. Geological Survey analysis of the Arctic due out in the spring of 2011. BOEMRE should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science -- and lessons learned from the Gulf of Mexico spill -- are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

Sincerely,

Ms. Heidi Grassberger
1565 N 117th St
Wauwatosa, WI 53226-3207

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

The goal of Lease Sale 193 was to produce oil from the Alaska OCS and boost domestic production from potential world-class energy deposits. OCS production has the potential to refill the Alaska oil pipeline, which is now operating at one-third of its 1988 peak flow. I support OCS production in Alaska.


Jacob Haverstick
Anchorage Lease 942

RECEIVED
NOV 24 2010
REGIONAL DIRECTOR, ALASKA OCS
MINERALS MANAGEMENT SERVICE
ANCHORAGE, ALASKA

From: Thomas.Homza@shell.com
Sent: Wednesday, November 17, 2010 8:19 AM
To: BOEMRE AK Public Comments
Subject: OCS Alaska Support
Follow Up Flag: Follow up
Flag Status: Red

Respectfully submitted by:

Thomas X. Homza, PhD
 7200 Northpark Dr.
 Anchorage, AK
 99516

November 17, 2010

Dear BOEMRE,

Sincere thanks for taking local opinions concerning OCS development. This is a difficult and important issue. Let me give you my demographic. My name is Tom Homza, I am an ardent democrat who proudly supported President Obama's candidacy and I believe his programs are generally prudent and wise. I was the first kid on the block to drive a hybrid out of principle. I came to Alaska 21 years ago primarily to practice geology and to experience the wilderness. My wife and I are raising an Alaskan family with what we believe are strong environmental principles.

I am also a Petroleum geologist. An explorer. I'm one of the folks who use the seismic data to find new oil and gas fields. I have worked for several multinational oil companies and I have worked throughout the region – in the North Aleutian Basin, Cook Inlet, ANWR, the Nenana Basin, the North Slope, the Canadian Beaufort, the Chukchi Sea, the Beaufort Sea – and I have a reasonably sound understanding of Alaska's hydrocarbon potential. It is my personal opinion that the Alaskan OCS, especially in the north, has the best potential for large, economically viable reserves in the state and very likely, in the nation. But I don't *know* that because the wells have not been drilled to prove it.

Back to my demographic: I acknowledge global climate change and the role of humans in it. The infamous hockey-stick Carbon curve and its correlation to industrial activity is, in my opinion, incontrovertible. I believe that we need to wean ourselves from our over-consumption of fossil fuels. But we must do this in the context of our very real current dependence upon oil – largely from an unstable supply of foreign oil. An economically weakened nation will not tread lightly on the environment. Thus, I believe that the essential transition to alternative energy sources will take time (especially for transportation energies) and that in the meantime, we need to keep domestic supply viable, first by knowing what we have through exploration. I believe it is a capital blunder to not even seek to know what our resource base is and that continued dismantling of Alaska's oil industry will surely decimate Alaska's economy.

The companies have not degraded Alaska's environment (which, again, I personally value very highly) beyond what I believe is acceptable to deliver the vibrant economy we enjoy here. Alaskan operations, including in the Chukchi and Beaufort, are proven to be clean and safe – the environmental record of

1/11/2011

Alaskan offshore exploration and production speaks for itself.

In conclusion, to me it is very unwise to curtail exploration by an industry with a strong environmental track record. It is unwise to do this in one of our nation's most prospective areas, precisely when we need more domestic supply, precisely when we need an economic boost, and well before we are ready to switch to alternative energy sources.

So, I urge you, as an environmentally concerned Alaskan and as a petroleum geologist, to help expedite both exploration and production in Alaska's OCS and the development of viable energy alternatives.

Again, thanks for making the commendable effort to hear our opinions. I empathize with your struggle and I hope this helps.

Tom Homza

1/11/2011

Irving Igtanloc Comment

From: igtanloc@barrow.com
Sent: Tuesday, November 09, 2010 3:44 PM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

Irving Igtanloc
 P.O. Box 530
 Barrow, AK 99723-0530

November 9, 2010

John Goll
 OCS Director, BOEMRE Alaska

Dear John Goll:

I urge the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) to ensure that any decision on oil and gas drilling in the Chukchi Sea is based on sound science and a basic respect for Arctic wildlife. The current draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193 dismisses the need to collect missing science and discounts potential negative impacts on entire species of Arctic wildlife.

On October 12, the Alaska region BOEMRE released the draft SEIS in response to a June ruling by the Alaska District Court that their environmental analysis was inadequate. In the original analysis, the agency noted hundreds of areas in which they lacked information about species, and yet failed to explain how this missing information might affect their decision process. In response to the court mandate, the Alaska regional office's draft SEIS made an across the board determination that none of the missing information was essential to a reasoned choice and that, no matter the impacts, it would allow drilling to proceed.

Alaska's BOEMRE's decision to release the draft SEIS goes against the Obama administration's commitment to science-based decision-making, especially in light of the systemic failures made evident by the Deepwater Horizon accident, which are still not addressed. Furthermore, it seems to directly disregard Secretary Salazar's September statement that "we must be thoughtful and responsible in developing... [Alaska's] resources so that we protect Alaska's fisheries, wildlife, and remarkable beauty for generations to come... In the Arctic, we must continue to be guided by caution, science, and the voices of North Slope communities, including Alaska Natives, as we chart a wise path forward."

In determining that we should accept any cost for drilling, the draft SEIS undercuts sound environmental stewardship and decision making for our oceans.

Instead of proceeding with the current draft SEIS, your agency should first put a priority on collecting essential missing information. This information should be based in part on the data generated by the ongoing United States Geological Survey analysis of the Arctic due out in spring 2011. The agency should then prepare a revised draft SEIS, followed by public review and comment, before making any final decisions.

BOEMRE's first priority must be protecting the wildlife and people whose survival is linked to the Arctic Ocean. It is critical that all necessary science and lessons learned from the Gulf of Mexico spill are incorporated into any final decision about where to allow oil drilling in the Chukchi Sea.

I am an Alaskan by birth and have lived in Barrow, Alaska for 51 years, my wife and I have four children, 14 grandchildren and 4 great-grandchildren, most of whom were born in Barrow

1

Irving Igtanloc Comment

with some in Anchorage.

I have a great and grave concern with regards to the present oil spill response equipment, tools, materials, etc., that are currently used in oil spill response work.

I have seen the clean up operations on the Exxon Valdez Oil Spill on local TV and have seen on TV the residual oil still under the surfaces of some beaches.

I have seen and heard of the impacts on the lives and lively hoods of Alaska residents who have been impacted. I have heard of Alaskan's that have had to move away from the birthplaces and homes BECAUSE THEY WERE NOT ABLE TO LIVE in those locations due to drastic losses to the subsistence foods needed to sustain their living in those areas.

I have witnessed the impacts on the residents of the North Slope the Oil Industry has had for over 30 years and see their actual levels of employment obtained by our residents and it is pitiful when one looks at the numbers and job positions. This does not help support off shore oil drilling in the Arctic when residents feel that employment will not be meaningful for them and therefore they must rely on traditional and subsistence way of lively hood while drilling and operations are in progress.

Then one considers, what can and will the Oil Industry do in response to an Oil Spill in the Arctic?

What will they do in the Fall Season when the storms commence and they have a major oil spill on the Arctic oceans? Are they going to be able to provide adequate Oil Spill Response work to capture all if not most of the oil? Will they be able to continue Oil Spill recovery when a Fall storm comes upon the oil spill recovery operations. Do they have Oil Spill equipment, tools, materials that make

What will they do in the Winter Months when the oceans are frozen over with ice and they have a major Oil Spill? Are they capable of recovering the oil from the ocean that is covered with ice?

In the Spring, is the Oil Industry capable of recovering oil from the Arctic oceans when the ice pack is loose and moving? What equipment, tools and materials do they have that is capable of picking up the oil in the water when the ice pack is loose and moving?

The Inupiat people of the Arctic learned to live in the Arctic and learned what the weather and winds bring with them, they knew when they could hunt and travel and when they should not hunt and travel.

When I look at the Exxon Valdez Oil Spill and its impacts on our residents and then look at the Gulf of Mexico Oil Spill and see the impacts the oil spill has on their marsh lands I have great and grave concerns regarding any off-shore drilling in the Arctic.

I am greatly concerned with the use of dispersants should an oil spill happen in the Arctic. My concern is that should the dispersed oil get in the food chain, the krell, clams, crabs, fish and then into the seals, ogorook, walrus, beluga, whales, the land where the caribou, ducks, geese, swans, bears, etc., the carcinogens from the oil is cancerous.

The Inupiat people of the Arctic already have the highest rate of cancer per population than anywhere else in the United State of America!

Who is to pay for the health problems caused by an Arctic Oil Spill?

What about the compensation for those who become incapacitated and can not longer hunt to feed their family?

The North Slope region is the ONLY Arctic area in the United State of America. There is no other area in the United States of America that is in the Arctic.

Thank you for considering my comments.

Sincerely, with great and grave concerns,

2

Irving J. Igtanloc
907-852-2767

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Industry has committed to unprecedented provisions for prevention and spill response that go above and beyond what is required by law. These provisions, combined with a stringent permitting process, give Alaskans a high level of confidence that exploration and development can occur safely and without harm to polar bears and other species. I support OCS production in Alaska.

JAMES JOHNSON
1003 CEDAR FBKS
AK 99709



Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Mr. & Mrs. Michael Kevany
615 Bennington Lane
Silver Spring, MD 20910

14 November 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management,
Regulation & Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

Dear Sir:

The Bureau of Ocean Energy Management, Regulation and Enforcement has determined that despite huge gaps in information about bowhead whales, polar bears, walrus and pretty much all living things in the Arctic, it was not a mistake to sell the Chukchi Sea off to the highest bidders in 2008.

This conclusion is simply wrong. Drilling in the Arctic is too risky. The Arctic is already weakened and fragile because of the warming climate. What's more, there is simply no technology to clean up oil in broken ice conditions. There is no way to mobilize even a fraction of the response required for the Gulf disaster in the remote Arctic. And a large oil spill could mean the difference between survival and extinction for struggling Arctic species.

Unfortunately, your draft supplemental EIS does not come anywhere near addressing these problems of critical importance. Your draft supplemental EIS does not satisfy your obligation to protect America's Arctic, and it does not comply with the law. In order to comply with the law, you must analyze the substantial gaps in scientific information in the current EIS and make a good-faith effort at obtaining information that is realistically attainable. And most importantly, you must not allow drilling to go forward unless you have the scientific knowledge to say that drilling in the Arctic is safe.

Respectfully,

Mike & Kathy Kevany
Mike & Kathy Kevany

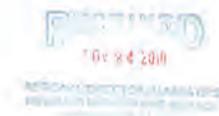


REGIONAL DIRECTOR, ALASKA OCS
BUREAU OF OCEAN ENERGY MANAGEMENT & SERVICE
ANCHORAGE, ALASKA

Drilling in the Arctic offers distinct differences than deepwater exploration and development in the Gulf of Mexico. The pressure encountered in deepwater drilling is multiple times greater than in Alaska where wells would be in very shallow water. There are also major differences in well designs, as well as fundamental differences in the geology of the regions. All of these contrasts should lead BOEM to conclude that exploration should move forward in the Chukchi.

I support OCS production in Alaska.

MELVIN JOHNSON
1008-25TH AVE
Fairbanks, Ak 99701



Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Rescinding the leases and allowing a de facto moratorium to continue will harm Alaska's economy and discourage future industry investment, without a corresponding benefit to the environment. I support OCS production in Alaska.

Spencer Lewis
PO Box 82976
Fairbank AK 99708



Ms. Irene Lopez
4986 Field St
San Diego
Ca 92110

Dear Regional Director, Alaska OCS Region
Re: Chukchi Lease
Sale Draft
SEIS.

The arctic is in trouble, its warming at twice the rate of the rest of the world! Chukchi Sea Species, including Polar bears and Pacific Walrus are already showing signs of stress from the unprecedented loss of their sea ice habitat - this is their home they have nowhere else to go! - This fall tens of thousands of Pacific walrus were on the shore near Point Lay Alaska an un-heard-of number because there was no suitable ice for them! If there is one thing we do know about

the arctic ocean is that there is no way to clean an oil spill in its wild + icy seas - Struggling Polar bears + walrus simply cannot survive dirty industrial drilling in their melting Chukchi sea! A large spill like the one in the Gulf of Mexico could mean the difference between survival and extinction for Alaska's endangered species - We still do not know the real outcome of the Gulf of Mexico oil spill - Drilling in the Arctic is too risky! I would be most grateful + would appreciate a kind reply.

Sincerely

From: Denise Meyer [dmeyer@sbfhcs.com]
Sent: Tuesday, November 16, 2010 9:35 AM
To: BOEMRE AK Public Comments
Subject: Bring Science to the Arctic

Thank you for this opportunity to comment on the draft Supplemental Environmental Impact Statement (SEIS) for Chukchi Sea Lease Sale 193.

I strongly encourage you to ensure that decisions about oil and gas activities in the U.S. Arctic Ocean are based on an adequate understanding of the marine ecosystems and the potential impacts of proposed industrial activities. The current draft SEIS for Lease Sale 193 wrongly dismisses the need to collect missing science, does not comport with the spirit or letter of the law, and should be rejected.

We need to conduct the necessary baseline scientific research and monitoring to provide an understanding of the Arctic ecosystem before making decisions that would allow oil and gas activities, including leasing, to occur. There is an acknowledged lack of scientific information about the Arctic food web and the ongoing effects of climate change, as well as an even more egregious lack of knowledge about the abundance and distribution of almost all species of marine mammals, seabirds, and fish.

The Administration should remain committed to science-based decision making by conducting the science necessary to fill the acknowledged missing information for the Chukchi Sea and to reevaluate its decisions based on the new information gathered.

As the tragedy in the Gulf of Mexico taught us, not having adequate scientific knowledge of the ecosystem or a working oil spill response plan can have tragic and irreversible consequences.

Please commit to making management decisions based on adequate science, not politics or profits. We must learn from the mistakes that were made in the Gulf of Mexico to avoid a similar tragedy from occurring in the fragile waters of America's Arctic Ocean.

Denise Meyer
Wauwatosa, WI

Gregg Nady
3022 Bentgrass Drive
Katy, TX 77450

November 15, 2010

Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, AK 99503-5820

ATTN: Chukchi Sea Draft SEIS

Dear Mr. Goff:

In response to your request for comments on the captioned document, I offer the following:

1. The gas development section should include a discussion of the emergence of shale gas production in the lower 48 and the likelihood that shale gas production will keep natural gas prices low enough to render Alaska gas exports to the lower 48 uneconomic for several decades. The Energy Information Administration forecasts that gas prices will not reach \$7-8/mcf until 2035 with domestic production of 22-24 TCF annually, up from ~20 TCF annually today.
2. Given #1 above, the only economic gas development option would be exporting gas to Asia; however, exports are currently prohibited under Section 28 of OSLA and the cost of arctic LNG export systems are likely to be very costly. The combination of #1 and #2 would make gas development in the Chukchi Sea extremely unlikely.

With respect to the 1502.22 analysis contained in Appendix A, I offer the following comments. These comments will refer to the EIS page number references used in the 1502.22 analysis. First, I would like to make two general comments.

1. There is a lot of discussion about the impacts of oil spills. It should be made clear that this EIS is addressing leasing and exploration, not development. BOEMRE's thorough environmental assessment of oil spills related to exploration drilling in Shell's Beaufort Sea exploration plan makes it clear that there has never been a significant oil spill from exploration drilling in the U.S. OCS. There have been over 17,000 exploration wells drilled on the U.S. OCS since 1953 without a significant oil spill. The Macondo oil spill on April 20, 2010, was related to well completion operations, after exploration operations on the well were finished. The Macondo oil spill was attributable to setting production casing, a bad cement job and displacing drilling mud with seawater. None of these actions will occur during the exploration or appraisal wells in the Alaska OCS. The operations which led to the Macondo oil spill will not take place in the Alaska OCS until a production structure is in place, which would not be expected to happen until

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approximately 10 years after an exploration well discovers oil and appraisal drilling determines sufficient volumes are in place to warrant development. There will be significant improvements in oil spill prevention, detection and response by the time development operations create even a remote risk of an oil spill in the Alaska OCS. The many years between now and first oil production provides ample time to fill any remaining data gaps.

2. Many of the statements related to lacking information in the Sale 193 EIS revolve around understanding bowhead whales and other marine mammals. It should be made clear that there has never been a documented case of a cetacean death from OCS oil and gas operations in the U.S. and possibly in the world. Furthermore, in the Chukchi and Beaufort Seas of the U.S. and Canada, there has been approximately 300,000 line miles of seismic acquired and 134 wells drilled since the 1970's (all within or in close proximity to primary bowhead whale migration and feeding habitat) and the bowhead whale population has grown from approximately 3,000 in the 1970's to approximately 10,500 today. If there were any population level cumulative impacts from these operations over the past 35 years, they would surely have manifested themselves by now. Additionally, nearly one billion barrels of oil has been produced from five man-made gravel islands in the Beaufort Sea state waters without any discernable impacts to any fauna or flora. While there is much that is not known about all aspects of each species living in the Chukchi Sea, it is clear that decades of exploration and development have not had a material impact on any species, nor on the ability of local residents to hunt these species for subsistence.
3. II-37: Many of the bird species discussed as having data gaps are described as "coastal" birds. It should be noted that a 25 mile coastal leasing deferral was implemented for Sale 193 and no leases were purchased within 50 miles of the coastline. In the very unlikely event of an oil spill in a development scenario, the prevailing currents in the Chukchi sea move westward, further diminishing the potential impact to coastal bird species.
4. III-32, III-33, III-34, III-35, III-36, III-39, III-40, III-41 & III-42: While there may be aspects of the Chukchi Sea fish populations which are not known today, it should be noted that other areas where oil and gas operations occur near fisheries, negative impacts to fisheries have not been experienced. These areas include the Cook Inlet, Norway, Newfoundland and the Gulf of Mexico. Since the Sale 193 action has nothing to do with commercial fishing, this missing information is irrelevant; however, much information about fish stocks in the Chukchi Sea will be obtained if leasing and exploration is allowed to move forward. The area has been closed to commercial fishing by the North Pacific Fisheries Management Council. Finally, coastal fish species are unlikely to be impacted in any scenario due to the 25 mile coastal deferral, the fact that no leases were purchased within 50 miles of the coastline, and the prevailing westerly currents in the Chukchi Sea.
5. III-45: While there may be uncertainty about the exact bowhead population (and there always will be), the bowhead whale has been intensely studied and the migration pathways and key feeding areas are well understood. No key feeding areas have been documented in the Sale 193 area.

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6. III-45: The work of Professor John Bickham has documented that the BCB stock of bowhead whales are a single genetic stock.
7. III-45: The recent BOEMRE 2010-033 study of Satellite Tracking of Western Arctic Bowhead Whales should be referenced which has confirmed what has been observed for many years. Bowhead whales use the eastern Chukchi Sea in the Sale 193 area as a migration pathway and there is very little lingering or feeding. Key feeding areas for bowhead whales are in the Amundsen Gulf of Canada, east of Barrow, on the Russian side of the Bering Straits and in the Bering Sea.
8. III-48: Refer to Professor Bickham's work as noted in #6 above.
9. III-51: Reference BOEMRE 2010-033 which confirms previously thought migration pathways.
10. III-53: Reference BOEMRE 2010-033.
11. III-56: According to NMFS, the fin whale range is south of the Bering Straits; therefore, this statement is not pertinent to the proposed action.
12. III-57: Same comment as #11 above.
13. III-58: According to NMFS, the humpback whale range is south of the Bering Straits; therefore, this statement is not pertinent to the proposed action.
14. III-62: See comment #3 above.
15. IV-82: The statement, "Lastly, and importantly, data are not available sufficient to characterize the current seasonal and temporal use of the Chukchi Sea Planning Area by bowheads and other whales, or to fully understand the importance of parts of the Beaufort Sea to bowhead whales", is not accurate. See comment #7 above.
16. IV-86: The concern stated about increasing levels of noise in the oceans and the cumulative impacts on whales should acknowledge that the oceans were much noisier prior to commercial whaling when whale populations were much greater. Whale vocalizations create significant noise. While anthropogenic sounds will increase with oil and gas development, there is nothing to suggest this will be at a level which will have a negative population level impact on whales. Perhaps the greatest impact on noise in the Arctic Oceans will be from the increasing whale populations and the related noise from vocalizations.
17. IV-89: While long-term impacts of seismic survey sound on whale hearing is unknown, it is well known that extensive activity has occurred in this region since the 1970's and the bowhead whale population is robust and growing, in spite of a significant subsistence harvest. See comment #2 regarding the levels of industry activity.
18. IV-121: An oil spill in the polynya zone described in this statement could only occur from a pipeline which could only occur during development which is not part of the proposed action and which could not occur for at least 10 years after successful exploration and appraisal.
19. IV-125: Please include support for the statement "There are, in some years and in some locations, relatively large aggregations of feeding bowhead whales within the proposed lease-sale area." The results of BOEMRE 2010-033 would not support this statement.
20. IV-140: See comment #3 above.
21. IV-145: Please provide support for the statement "However, the effects of full-scale industrial development of the waters of the Chukchi Sea likely would accumulate through displacement of marine mammals from their preferred habitats, increased mortality, and

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- decreased reproductive success." See comment #2 above. There is no basis to suggest that there would be increased mortality or decreased reproductive success in the Chukchi Sea. The statement regarding increase ship traffic in the Northwest Passage may be true, but since there is no evidence of any adverse impacts from oil and gas development, there is no additional cumulative impact from oil and gas development. "Full scale industrial development" in this statement should also be defined.
22. IV-154: See comment #2 above. While impacts to individual animals are very difficult to assess, it is clear from a population level view that oil and gas development will not have a material negative impact on whales or polar bears.
 23. IV-163: The statement "Much information is already known on the general habits of the many species of birds that use the Chukchi Sea" should be changed to read "Much information is already known on the general habits of beluga whales that use the Chukchi Sea."
 24. IV-32 on page 105 through IV-97 on page 126 appear to be repeated from earlier in the document.
 25. V-16: It should be noted that air quality will be protected by air emissions permits issued by EPA.
 26. V-20: These statements are clearly inaccurate. Refer to comment #2 above.
 27. V-25: These statements are clearly inaccurate. Refer to comment #2 above.
 28. V-48: An explanation is needed to understand why the statement is not essential to making a reasoned choice.
 29. V-49: See comment #2 above.
 30. V-68: It should be noted that many positive sociocultural benefits would result from oil and gas development, such as shared infrastructure available to local communities, platforms acting as safe harbors for other ocean users, availability of search and rescue assets, tax base to provide revenue for local investments in schools and other public services and improved science and understanding of the marine ecosystem.
 31. Pages 141-143 should be deleted.

In addition to the foregoing SEIS specific comments, it is imperative that exploration drilling be pursued as quickly as possible. DOI/BOEMRE is charged with implementing the OCS Lands Act which provides in part, "the outer Continental Shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs;". It is clear that the current "suspension" of arctic exploration drilling is uncalled for and contrary to law. It is a disservice to the American taxpayer to further delay the possible receipt of billions of dollars in royalties and additional lease bonus. This revenue funds 90% of the Land and Water Conservation Fund which is used to implement park projects across the U.S. and 100% of the Historic Preservation Fund. OCS revenue is also the second largest revenue source to the U.S. Treasury, second only to the IRS. The potential for oil production from the Chukchi Sea will reduce our 80% dependence on foreign oil imports, improve our balance of trade deficit, add thousands of jobs, keep the Trans Alaska Pipeline System viable, add tax base for local indigenous peoples of the North Slope and add vast amounts of scientific research on these arctic ecosystems.

Thank you for the opportunity to submit these comments.

Yours very truly,

Gregg Nady



4

From: Earthjustice [info@earthjustice.org] on behalf of Colleen O'Donnell [cmodon71@aol.com]
Sent: Wednesday, November 10, 2010 6:26 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

Nov 10, 2010

Alaska OCS Region BOEMRE

Bureau of Ocean Energy, Management, Regulation, and Enforcement, 1849 C Street, N.W.
Washington, DC 20240

Dear BOEMRE,

Your recent draft supplemental environmental impact statement for the Chukchi Sea Lease Sale 193 is an unnecessarily hurried attempt to paper over, rather than obtain, essential missing information about the Chukchi Sea. The Bureau readily admits that without missing information about the basic ecology of the area, it is in many cases not possible to judge the impacts of oil and gas activities resulting from the lease sale. Nevertheless, the Bureau has determined in its draft supplement that it will obtain none of the missing information before making its leasing decision. This decision is unsupportable.

The draft supplement utterly fails to assess the true impacts of oil and gas drilling and other lease activities in this fragile region. Simply stating that the agency does not know the impacts is not acceptable. For example, a catastrophic oil spill in the harsh, remote waters of the Arctic Ocean will devastate that region. Twenty-foot ocean swells, frozen seas, subzero temperatures and a lack of infrastructure will make an oil spill nearly impossible to clean up.

The Bureau also must more meaningfully assess the potential impacts of natural gas development in the Chukchi Sea as a result of the lease sale. Simply assuming they will be similar to impacts from oil development alone is not enough.

The Bureau's actions here represent a business-as-usual approach to rush through Arctic offshore oil leasing even in light of the major failures at the agency recently brought to light by the Gulf spill. There should not be a rush to lease the Chukchi Sea and open it to oil and gas drilling. As the Gulf spill has taught us, allowing oil and gas development in the offshore before fully analyzing and preparing for its potential impacts can have tragic and irreversible consequences.

I urge you to ensure that decisions about Chukchi Sea Lease Sale 193 are made with adequate scientific information and analysis. President Obama has made a commitment to policy decision-making that relies on science, not politics or profits. Your agency must comply with this mandate and recognize the need for more scientific analysis of Arctic Ocean drilling before you proceed with Lease Sale 193.

Please rely on sound science and learn from mistakes made in the Gulf before you allow oil and gas leasing in the fragile waters of America's Arctic Ocean.

Sincerely,

Ms. Colleen O'Donnell
734 N 119th St
Wauwatosa, WI 53226-3625

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From: Cta [Cta@consumerenergyalliance.org]
Sent: Tuesday, November 30, 2010 6:59 AM
To: BOEMRE AK Public Comments
Subject: Attn: Chukchi Sea Draft SEIS

November 2010

John Goll, Regional Director
Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS - Allow Responsible Access to Alaska's Resources

Dear Mr. Goll:

I am writing to express my support for the planned oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

The draft supplemental Environmental Impact Statement (SEIS) recently released by the federal government properly addresses all concerns expressed by the U.S. District Court in Alaska. Thus, it is my hope that the federal government will finally approve the responsible development of the Chukchi's abundant oil and natural gas resources.

It is important that the federal government brings Alaska's vast oil and natural gas reserves back online. Jobs in Alaska and across the nation depend on the opportunities that offshore oil and gas production can and will provide. In fact, a study by the University of Alaska found that new offshore energy production in the state of Alaska would produce an annual average of 35,000 jobs - both directly and indirectly generated by increased offshore production - over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, new offshore oil and gas development in Alaska will stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states, from steel and pipe manufacturers in the Midwest, to shipping on the coasts, to advanced computer technology in California and Seattle, to Union Labor for pipeline construction and maintenance.

In conclusion, I strongly believe that the federal government should move forward with the SEIS process and the development of Lease Sale 193 in the Chukchi, as well as pave the way for the State of Alaska to receive a portion of the proceeds from such development through revenue sharing.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,
Roy Palmer
549 Marshall Dr.
Fairbanks, Alaska 99712

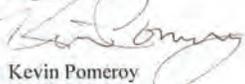
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Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

I urge the BOEM to allow the development of Alaska OCS to continue. Of the 30 wells that have been drilled in the Chukchi and Beaufort seas, there has never been a blow out that has resulted in an oil spill. Many of these wells were drilled in the 1980's with technology that is significantly less stringent than the technology that exists today. Given the distinct differences in deepwater drilling in the Gulf of Mexico, and relatively shallow depth of drilling in Alaska; I believe the FEIS and SEIS will safely and adequately address any safety and environmental concerns.

I write in support of oil and gas development enabled by Lease 193 in the Chukchi Sea.

Regards,



Kevin Pomeroy

970 Goldmine Trail

Fairbanks, Alaska

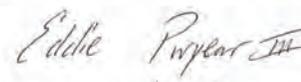
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RECEIVED
NOV 24 2010
BUREAU OF OCEAN ENERGY MANAGEMENT

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

The long-term outlook for oil production on the North Slope is one of gradual decline supplemented with smaller field-size oil development with gas field development in or near existing infrastructure. The state expects average daily production in fiscal year 2010 to drop to 650,000 barrels per day and 619,000 barrels per day in fiscal year 2011.

I support development of OCS production in Alaska.


687 Slater Dr.
Ft. S. AK. 99701

CELL # 590-5328

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NOV 24 2010
BUREAU OF OCEAN ENERGY MANAGEMENT

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

The North Slope and the offshore are now perhaps the most studied energy basins in America. In the past decade, over 250 studies have been funded in the Arctic, with the majority focused on the Beaufort and Chukchi Seas. I support OCS drilling and production in Alaska. Stop doing more studies, let's get to work!

Mark C. Garrison
435 Todd Ct Fairbanks Ak, 99709
(907) 452-0595

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NOV 24 2010

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

I support OCS drilling and production in Alaska. The OCS in Alaska holds more potential than Prudhoe Bay, with the possibility of surpassing the reserves of Prudhoe Bay. With declining through-put in TAPS; Alaskans as well as the entire nation, need to develop this valuable resource.

Dan Schultz Sr
Dan Schultz Sr
591 Constitution Dr #A
Fairbanks AK 99709
(907) 457-3932

RECEIVED
NOV 24 2010
REGIONAL DIRECTOR, ALASKA OCS
MINERAL MANAGEMENT SERVICE

From: Destin.Singleton@shell.com
Sent: Tuesday, November 16, 2010 6:42 AM
To: BOEMRE AK Public Comments
Subject: I support responsible access to Alaska's Resources: Chukchi Sea Draft SEIS

Dear Mr. Goll:

I strongly support oil and gas development of Lease Sale 193 in the Chukchi Sea off the coast of Alaska.

Following a recent decision by the federal courts, the Department of Interior has issued a draft supplemental Environmental Impact Statement (SEIS). Following conclusion of this regulatory process, it is my hope that the federal government will move quickly and finally approve the responsible development of the Chukchi's abundant oil and natural gas resources.

With Alaska and national unemployment at record levels, it is important that we develop Alaska's vast oil and natural gas reserves. In fact, a 2009 study by the University of Alaska found that new offshore energy in Alaska would produce an annual average of 35,000 jobs - both directly and indirectly generated by increased offshore production - over the next 50 years for the state of Alaska alone, with a total payroll of \$72 billion (2007) over the 50-year period.

Further, because energy is such a vital part of our domestic economy, new offshore development in Alaska's Chukchi Sea will help stimulate America's economic recovery by generating thousands of new, high-paying jobs throughout the 50 states.

Now is the time to move forward in support of thoughtful, safe and efficient energy production.

Now is the time to promote policies that encourage job creation while growing the economy and providing the nation with much needed U.S. energy supplies.

Sincerely,

Destin Singleton
1605 Columbia
Houston, TX 77008-4307

Attn: Chukchi Sea Draft SEIS

Jim Steitz
357 Vista Street Apt. 5
Ashland, OR 97520

November 11, 2010

John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820

Dear Mr. Goll,

I write to urge you to **reconsider your proposal to open the Chukchi Seas to oil and gas drilling**. This fossil fuel production is contrary to the Administration's stated goals of moving America toward cleaner energy sources, and places at grave risk one of the most pristine Arctic Ocean ecosystems under American jurisdiction.

The lease sale 193 penetrates too deeply into some of the last refuges for endangered sea mammals, including bowhead and beluga whales. Far from the compromise position that BOEMRE has implied, this lease of oil and gas actually represents absolute and complete exploitation of fossil fuels wherever they may exist, regardless of the ecological consequences. BOEMRE has not struck a reasonable balance between values of ecological integrity and values of energy consumption. More than four million acres of the Arctic Ocean waters have already been leased during the Bush Administration. This seems a sufficient short-term compromise of wilderness and wildlife values.

Moreover, neither lease sale 193 nor other offshore oil and gas drilling, in any sense, represents any "bridge" or "transition" to a cleaner energy future. Rather, this oil and gas drilling will only frustrate and retard America's efforts to shift toward renewable energy. **Our ability to shift away from oil and gas will only be hampered by federal policies that place more oil and gas on the national or world markets**, and depress the important price signals that encourage energy conservation and efficiency.

While the removal of Bristol Bay from the Interior Department's proposed program of Arctic oil and gas exploitation is commendable, the protection of Chukchi Sea is equally and critically important. The previous Administration and America in decades prior have already sacrificed enough of our Arctic frontier, and there is no "compromise" in further slicing, between destruction and temporary reprieve, the Arctic ecosystems that remain. Chukchi Sea is a national treasure that must be protected. There is no amount of energy or profit that would offset or justify the ecological impact, particularly when the global warming liability of the oil and gas is considered.

Again, please reverse your proposal, on lease sale 193, to permit oil and gas drilling in the Chukchi Sea, and instead **protect this ecosystem while forcing America toward renewable energy**. Thank you for your consideration.

Sincerely,

Jim Steitz
Jim Steitz

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NOV 16 2010

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Given the impact of high energy prices on Americans and their economy, the U.S. has a moral obligation to develop domestic energy sources, both onshore and offshore. I support the development of OCS production in Alaska.

Dawn Prout
2830 Riverview Dr.
Fairbanks, AK 99709



Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

There has never been a blowout in the Alaska or the Canadian Arctic that resulted in an oil spill. Thirty wells have been drilled in the Beaufort and five in the Chukchi – all without incident. These wells were drilled in the 1980s, utilizing older technology compared to what exists today. I support OCS production in Alaska.

*my name is
JAMES M ULAND
ADDRESS
IS
4112 HANIES AVE
FAIRBANKS ALASKA
I HAVE BEEN AKI
32 YEARS
WE NEED THIS SOON
G-mull*

RECEIVED
NOV 24 2010
REGIONAL DIRECTOR, ALASKA OCS BUREAU

Gary R. Wilken
Alaska State Senator (retired)
2600 Riverview Drive
Fairbanks Alaska
99709
garywilken@me.com

November 23, 2010

Mr. John Goll, Regional Director, Alaska OCS Region
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

RE: Chukchi Sea Draft SEIS Comment - Support Access to Alaska's OCS Oil and Gas Resources

Dear Mr. Goll,

I respectfully write in strong support of development under Lease Sale 193.

Alaskans are in a dangerous place: America faces a financial recession that has cut off many at the knees – home foreclosures, job layoffs, and the mental stress that comes with financial troubles are taking their toll on the country. It won't be long before the full force reaches Alaska.

In order to survive, Alaska needs a real self-sustaining economy to not only support itself and its residents, but to also support our nation. As you well know, Alaska occupies a key strategic location, not only for Arctic trade routes, but also as the primary home for America's missile defense sites protecting our country and our valued allies. In order to support the infrastructure that makes carrying out these important tasks possible, a grounded population base rooted with good-paying jobs and a stable economy is absolutely necessary.

Please support development of Lease Sale 193 in the Chukchi Sea. Both America and Alaska will benefit by a positive, and responsible decision.

Sincerely,

Gary Wilken
Gary R. Wilken
Fairbanks Alaska

NOV 29

Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Shell returned to Alaska in 2005 to participate in Beaufort Lease Sale 202, signaling the first major offshore activity in Alaska in decades and a new era of exploration in the Arctic. As a result of that sale and subsequent partnerships, Shell now owns outright or holds an equity position in 137 leases in the Beaufort Sea - stretching east from Harrison Bay to an area north of ANWR. The leases Shell picked up in 2005 included Unocal's Hammerhead discovery and Arco's Kuvlum discovery. I support development of OCS production in Alaska.

Cindy Wilson
3210 Parks Hwy #8
FBKS, AK 99709



Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and
Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

Demand for energy is continuing to rise and the
U.S. requires continued development of America's
oil and gas resources as the nation transitions to
the new energy sources of the future. I support
OCS drilling in Alaska.

Stanley Z. Woodman
1620 Washington Ave. #69
Fairbanks, Ak. 99709



Regional Director, Alaska OCS Bureau
Bureau of Ocean Energy Management, Regulation and
Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503-5820
("Attn: Chukchi Sea Draft SEIS")

As throughput in the Trans-Alaska Pipeline continues to
decline, many look to the Alaska OCS as a critical new
source of oil. A recent economic study completed by
Northern Economics and the Institute of Social and
Economic Research estimates the oil and gas reserves in
the Alaska offshore could exceed those of Prudhoe Bay.

I support development of OCS production in Alaska.

Zebulon Woodman

1809 Roberts Rd
FBKS, AK 99709

(907) 322-5605



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

