

**UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE, GULF OF MEXICO OCS REGION**

NTL No. 2003-G17

Effective Date: August 27, 2003

**NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULPHUR
LEASES IN THE OUTER CONTINENTAL SHELF, GULF OF MEXICO OCS REGION**

**Guidance for Submitting Exploration Plans and
Development Operations Coordination Documents**

This Notice to Lessees and Operators (NTL) supersedes NTL No. 2002-G08, effective August 29, 2002. The table below summarizes the changes. The purpose of this NTL is to provide guidance on preparing Exploration Plans (EP's) and Development Operations Coordination Documents (DOCD's) that are required by *current* 30 CFR 250, Subpart B.

NTL Part	Description of Change
General Requirements for EP's and DOCD's	On page 3, deletes the trigger that requires automatic revision of an approved EP or DOCD to conduct an activity if more than 10 years has elapsed since any previous activity was conducted.
Copies of EP's and DOCD's	On page 4, adds a recommendation that you submit electronic copies of EP's and DOCD's as a single file.
Appendix A	Adds a sentence to paragraph (D) for DOCD's concerning information on the platform installation method.
Appendix B	Adds prospect name to EP information.
Appendix C	Clarifies that shallow hazards assessments are required only for surface locations that the MMS GOMR has not previously approved. Clarifies under <u>Hydrogen Sulfide (H₂S) Information</u> in this Appendix that you may consider any reference to correlative stratigraphic sections to be proprietary.
Appendix D	Changes the title to Biological and Physical Information. Updates the reference for "Remotely Operated Vehicle (ROV) Surveys" to NTL No. 2003-G03 for guidance on providing ROV survey information. Adds a reference to live bottoms reports and archaeological survey reports.
Appendix E	Clarifies when to provide "disposed wastes information" and corrects the website address for a listing of exempted areas for deepwater drilling operations.
Appendix F	Reformats the appendix to provide triggers with each information item, makes reference to subregional OSRP's, eliminates the need to list all companies covered by your OSRP, clarifies EP worst case scenario description, clarifies the instances when facility tanks and production vessels information is provided, and exempts oil characteristics information from EP's.
Appendix I	Adds guidance for preparing coastal effects evaluations for Louisiana; in Attachment 1, removes the phrase "and discharges" from Louisiana's required necessary data and information; and, in Attachment 1, modifies paragraph (b) and adds paragraphs (d) through (k) as information that Florida has specifically identified in their management program as required necessary data and information.

Please note that the Minerals Management Service (MMS) published a Notice of Proposed Rulemaking (NPR) to restructure and revise the current 30 CFR 250, Subpart B regulations (May 17, 2002, FR 35372-35396). In connection with the proposed rulemaking, the MMS Gulf of Mexico OCS Region (GOMR) developed a draft companion NTL to provide guidance on the proposed regulations. The draft NTL is posted with the NPR on the MMS Internet website at <http://www.mms.gov/federalregister/2002.htm>.

Proprietary Information

Information required by 30 CFR 250, Subpart B informs MMS, affected States, and the public of planned exploration, development, and production operations. Sections 30 CFR 250.196(a) and (b) specify the data and information that must be made available to the public without the consent of the lessee and under what circumstances and time period. Pursuant to 43 CFR 2.13(c)(9), we have determined that the following information you submit with an EP or DOCD may be considered proprietary. If you omit required information that is not proprietary from the Public Information copy of an EP or DOCD, the MMS GOMR will not deem the plan submitted. All information furnished as part of an EP and DOCD, except that identified below as being proprietary, will be made available to the affected States and the public in the Public Information copy of the plan.

Appendix	Item	Justification
Appendix A	EP and DOCD Item (A) – Discussion of the geological objectives (including a brief description of the hydrocarbon trapping elements). EP and DOCD Item (B) – BHL, TVD, MD information.	Geological information
Appendix B	DOCD Item (C) – Production rates and life of reserves	Geological information
Appendix C	All items under <u>Geological and Geophysical Information</u> except for the non-proprietary shallow hazards assessment in Item (E) and under <u>Hydrogen Sulfide (H₂S) Information</u> , any reference to correlative stratigraphic sections.	Geological and geophysical information
Appendix D	None	N/A
Appendix E	None	N/A
Appendix F	None	N/A
Appendix G	None	N/A
Appendix H	None	N/A
Appendix I	None	N/A
Appendix J	BHL, TVD, MD information.	Geological information

General Requirements for EP's and DOCD's

Before you conduct any exploration activities on an OCS lease or unit, MMS regulations require you to submit, and the MMS must approve, an EP that covers those activities. Before you conduct any development and production activities on an OCS lease or unit in the western Gulf of Mexico, MMS regulations require you to submit, and the MMS must approve, a DOCD that covers those activities. Before you conduct any development and production activities on a lease or unit in any OCS area in the eastern Gulf of Mexico, MMS regulations require you to submit,

and the MMS must approve, a Development and Production Plan (DPP) that covers those activities. The MMS GOMR will provide guidelines for DPP's at a future date.

In addition to Initial EP's and DOCD's (which are defined as the first OCS plans to be submitted after the lease is awarded), the MMS GOMR has determined that there are three types of revisions to EP's and DOCD's:

A **Revised Plan**, a revision to an approved OCS plan, proposes **changes** such as those in the location of a well or platform, type of drilling unit, or location of the onshore support base.

A **Supplemental Plan**, a revision to an approved OCS plan, proposes the **addition** of an activity that requires a permit.

An **Amended Plan**, any revision to a pending OCS plan.

Each of these types of OCS plans needs to contain only that information related to or affected by the proposed revision. However, make sure the description of the proposed revision is complete and includes the rationale for the proposed changes as they relate to the approved or pending OCS plan. It would also be helpful if you would reference in the revised OCS plan the approval date or MMS control number, if known, of the approved OCS plan you are revising.

In the MMS GOMR, revise your approved EP or DOCD when you

1. Change the type of drilling rig (e.g., jack-up, platform rig, barge, submersible, semisubmersible, or drillship), production facility (e.g., caisson, fixed platform with piles, tension-leg platform, etc.), or transportation mode (e.g., pipeline, barge) you will use to carry out the activities under your approved plan.
2. Change the surface location of a well (or associated anchor) by more than 100 feet in water depths less than 400 meters, or by more than 500 feet in water depths 400 meters or greater.
3. Increase the emissions of an air pollutant to an amount greater than that in your approved plan.
4. Request a new hydrogen sulfide (H₂S) area classification or encounter a concentration of H₂S greater than 500 parts per million (ppm).
5. Change the location of your onshore support base from one State to another.
6. Change the approved anchor array pattern associated with your activities or increase the anchor radius by more than 500 feet if the MMS GOMR did not approve a specific anchor pattern.

Supplement your approved EP or DOCD when you propose to conduct activities on the lease(s) or unit that require permits and are not covered by your approved EP or DOCD.

Copies of EP's and DOCD's

To expedite the review and coordination of your EP's and DOCD's, the MMS GOMR recommends that you submit the following number of copies for both EP's and DOCD's:

1. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect the State of Florida (22 copies: 5 Proprietary and 17 Public Information).
2. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect the State of Alabama (10 copies: 5 Proprietary and 5 Public Information).
3. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect both the States of Mississippi and Louisiana (11 copies: 5 Proprietary and 6 Public Information).
4. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect both the States of Mississippi and Louisiana and that are exempted from Coastal Zone Management (CZM) certification requirements (9 copies: 5 Proprietary and 4 Public Information).
5. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect only the State of Louisiana (9 copies: 5 Proprietary and 4 Public Information).
6. Supplemental OCS Plans that describe activities on leases and unit areas on the OCS that affect only the State of Louisiana and that are exempted from CZM certification requirements (8 copies: 5 Proprietary and 3 Public Information).
7. Initial and Supplemental OCS Plans that describe activities on leases and unit areas on the OCS adjacent to the State of Texas (9 copies: 5 Proprietary and 4 Public Information).
8. Supplemental OCS Plans that describe activities on leases and unit areas on the OCS adjacent to the State of Texas and that are exempted from CZM certification requirements (8 copies: 5 Proprietary and 3 Public Information).

The MMS GOMR recommends that you submit 7 copies (5 Proprietary and 2 Public Information) for all revised and amended plans.

If you so choose, you may submit the copies above on separate CD-ROM's. (However, submit at least one Proprietary copy on paper.) In order to expedite our review, the MMS GOMR recommends that you submit at least one Proprietary and one Public Information copy as single files on separate CD-ROM's. Please ensure that all files are in portable document format (PDF) or other acceptable format.

Timely Submission of EP's and DOCD's

The OCS Lands Act requires the MMS GOMR to review, analyze, and take final regulatory action on EP's and DOCD's within a relatively short period of time after their receipt. In addition, when requested, the MMS GOMR attempts to accomplish these tasks in even shorter

periods to accommodate your drilling, platform installation, or pipeline construction schedules, or for other reasons. This expediting sometimes causes disruptions in the normal review and analysis process and makes it extremely difficult to meet the mandated deadlines for other OCS plans that have been submitted timely. Therefore, we seek your cooperation in ensuring that you submit all OCS plans and permit applications to the MMS GOMR sufficiently in advance to provide the MMS GOMR with the maximum review time possible.

Information Requirements for EP's and DOCD's

The information requirements for OCS plans are specified in 30 CFR 250.203(a) and (b) for EP's and 30 CFR 250.204(a) and (b) for DOCD's. According to 30 CFR 250.203(b)(21) and 30 CFR 250.204(b)(17), the MMS GOMR may require data and information to be included in EP's and DOCD's in addition to that specified by the regulations. Conversely, 30 CFR 250.203(d) and 30 CFR 250.204(e) allow the MMS Regional Director to limit the amount of information to be included in EP's and DOCD's to that necessary to comply with the OCS Lands Act, as amended; other laws; applicable regulations; and lease provisions.

The President's National Energy Policy (May 2001) directs Federal agencies to streamline and expedite permitting processes. In line with this Policy, you no longer need to provide broad regional-scale environmental descriptive information that is readily available in the extensive information and analyses contained in the latest MMS EIS's (e.g., Lease Sale 189 for the Eastern Planning Area), as well as the numerous historical and recently completed Environmental Studies. However, under MMS regulations, you must provide site-specific environmental information, such as water depth and seafloor morphology, as a matter of routine and identify any project-specific environmental impacts, such as onshore construction, that would result from conducting the activities proposed in the plan.

The MMS GOMR has developed Appendices A through J of this NTL as guidelines for preparing your EP's and DOCD's in the Gulf of Mexico. You should consider these Appendices as guidance documents. These appendices are:

Appendix	Title	Page
Appendix A	Contents of the EP or DOCD	7
Appendix B	General Information	9
Appendix C	Geological, Geophysical, and H ₂ S Information	11
Appendix D	Biological and Physical Information	15
Appendix E	Wastes and Discharges Information	17
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Appendix G	Air Emissions Information	24
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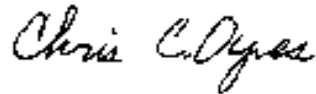
In preparing your EP or DOCD, you may reference information and data discussed in other documents previously submitted or otherwise readily available to the MMS GOMR and other reviewers.

Paperwork Reduction Act of 1995 Statement

The information collection referred to in this NTL is intended to provide clarification, description, or interpretation of requirements contained in 30 CFR 250, Subpart B. The Office of Management and Budget (OMB) has approved the information collection requirements in these regulations and associated forms under OMB control number 1010-0049. In addition, the NTL refers to information collection requirements in 30 CFR 250, Subpart C (1010-0057) and Subpart D (1010-0141); 30 CFR 254 (1010-0091); and 30 CFR 256 (1010-0006). The OMB has approved the information collection requirements in these regulations and assigned the OMB control numbers indicated in parenthesis for each. This NTL does not impose any information collection requirements subject to the Paperwork Reduction Act of 1995.

Contact

Please contact the MMS GOMR Plans Section at (504) 736-2419 if you have any questions regarding this NTL.



Chris C. Oynes
Regional Director

Appendices

APPENDIX A CONTENTS OF PLAN

The MMS GOMR has determined, pursuant to 43 CFR 2.13(c)(9), that the following items in this Appendix may be considered proprietary: Under Item (A) - discussion of the geological objectives (including a brief description of the hydrocarbon trapping elements), and under item (B) – bottomhole (BHL), true vertical depth (TVD), and measured depth (MD) information.

Your EP should include:

(A) Description, objectives, and schedule. A description, discussion of the geological objectives (including a brief description of the hydrocarbon trapping elements), and tentative schedule (from start to completion) of the exploration activities (e.g., drilling, well test flaring, installing a well protection structure, temporary well abandonment) you propose to undertake.

(B) Location. A map (separate from any other required map, such as the chemosynthetic communities map referenced in Appendix D) showing the surface location(s) of your proposed wells and any associated anchors. Indicate water depths on the map. A table indicating the surface location (SL), bottomhole location (BHL), true vertical depth (TVD), measured depth (MD), and water depth for each proposed well. The table should also include the distance from the lease lines, the Lambert x-y coordinates, and the latitude and longitude. (The BHL's, TVD's, and MD's may be omitted from public information copies of the EP.) A separate table giving the Lambert x-y coordinates for any associated anchors, including those for semisubmersible drilling rigs. (If the exact locations of anchors are not known, you may provide a maximum anchor radius instead.)

(C) Drilling unit. A description of the drilling unit and associated equipment you will use to conduct your proposed exploration activities, including a brief description of its important safety and pollution prevention features.

Your DOCD should include:

(A) Description, objectives, and schedule. A description, discussion of the geological objectives, and tentative schedule (from start to completion) of the development and production activities (e.g., development drilling; well test flaring; installation of production platforms, satellite structures, subsea wellheads and manifolds, and lease term pipelines; and installation of production facilities and conduct of production operations) you propose to undertake.

(B) Location. A map (separate from any other required map, such as the chemosynthetic communities map referenced in Appendix D) showing surface location(s) of your proposed wells and any associated anchors and your proposed facilities and, if applicable, any associated permanent anchors, and the area expected to be disturbed by any anchors during construction of the facility. Indicate water depths on the map. A table indicating the surface location (SL), bottomhole location (BHL), true vertical depth (TVD), measured depth (MD), and water depth for each proposed well and the surface location and water depth of each facility. The table should also include the distance from the lease lines, the Lambert x-y coordinates, and the latitude and longitude. (The BHL's, TVD's, and MD's may be omitted from public information copies of the DOCD.) A separate table giving the Lambert x-y coordinates for any associated anchors, including those for semisubmersible drilling rigs and construction barges. (If the exact locations of anchors are not known, you may provide a maximum anchor radius instead.)

(C) Drilling unit. A description of the drilling unit and associated equipment you will use to conduct any proposed development drilling, including a brief description of its important safety and pollution prevention features.

(D) Production facilities. A description of the production platforms, satellite structures, subsea wellheads and manifolds, lease term pipelines, production facilities, umbilicals, and other facilities you will use to conduct your proposed development and production activities, including a brief description of their important safety and pollution prevention features. For platforms and satellite structures, briefly describe the installation method you will use (e.g., derrick barge, drilling rig).

APPENDIX B GENERAL INFORMATION

The MMS GOMR has determined, pursuant to 43 CFR 2.13(c)(9), that the following items in this Appendix may be considered proprietary: For DOCD's only, under Item (C) – Production rates and life of reserves.

Your EP should be accompanied by:

(A) Contact. The name, address, e-mail address (if available), and telephone number of the person with whom the MMS GOMR and the affected State(s) can communicate about your EP.

(B) Prospect name. If applicable, the name of your exploration prospect.

(C) New or unusual technology. A description and discussion of any new or unusual technology you will use to carry out your proposed exploration activities. In the public information copies of your EP, you may exclude any proprietary information from this description. In that case, include a brief discussion of the general subject matter of the omitted information. If you will not use any new or unusual technology to carry out your proposed exploration activities, include a statement so indicating.

(D) Bonding information. A statement that the activities and facilities proposed in your EP are covered by an appropriate lease or area-wide surety bond or alternate security instrument according to 30 CFR 256, subpart I.

(E) Onshore base and support vessels. A brief description of the onshore base you will use to support the exploration activities, including information as to whether the facilities at the base are existing, proposed, or are to be expanded; a brief description of support vessels and aircraft you will use and information concerning their frequency of travel; and a map showing the lease relative to the shoreline and depicting proposed transportation routes and distance to shore in miles.

(F) Lease stipulations. A description of the measures you took or will take to satisfy the conditions of lease stipulations related to your proposed exploration activities. For proposed activities affected by the Eastern Planning Area oil spill stipulation, include a description of the equipment you will procure and the timeframe for its onsite placement or availability.

Your DOCD should be accompanied by:

(A) Contact. The name, address, e-mail address (if available), and telephone number of the person with whom the MMS GOMR and the affected State(s) can communicate about your DOCD.

(B) Project name. If applicable, the name of your development project.

(C) Production rates and life of reserves. Estimates of the average and peak rates of production for each type of production and the life of the reservoir(s) you intend to produce.

(D) New or unusual technology. A description and discussion of any new or unusual technology you will use to carry out your proposed development and production activities. In the public information copies of your DOCD, you may exclude any proprietary information from this description. In that case, include a brief discussion of the general subject matter of the omitted information. If you will not use any new or unusual technology to carry out your proposed development and production activities, include a statement so indicating.

(E) Bonding information. A statement that the activities and facilities proposed in your DOCD are covered by an appropriate lease or area-wide surety bond or alternate security instrument according to 30 CFR 256, subpart I.

(F) Onshore base and support vessels. A brief description of the onshore base you will use to support the development and production activities, including information as to whether the facilities at the base are existing, proposed, or are to be expanded or undergo major modification; a brief description of support vessels you will use and information concerning their frequency of travel; and a map showing the lease relative to the shoreline and depicting proposed transportation routes and distance to shore in miles.

(G) Lease stipulations. A description of the measures that you took or will take to satisfy the conditions of lease stipulations related to your proposed development and production activities. For proposed activities affected by the Eastern Planning Area oil spill stipulation, include a description of the equipment you will procure and the timeframe for its onsite placement or availability.

(H) Related OCS facilities and operations. A description including the location of any proposed or existing drilling units, production platforms, pipeline accessory platforms, host facilities, pipelines and associated umbilicals (including those that transport chemical products and produced water), or other facilities and operations located on the OCS (regardless of ownership) that directly relate to your proposed development or production activities. This description should include the size, length, proposed routes, product(s) being transported, maximum flow rates, and the shut-in time of any proposed pipelines.

(I) Transportation information. A discussion of the transportation system that will be used to transport your production to shore, including the routes of any new pipelines and a description and location of the primary onshore terminal (including any refineries, gas plants, and compressor stations that will be built or undergo expansion or major modification as the result of the activities proposed in your DOCD).

APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H₂S INFORMATION

Geological and Geophysical Information

The MMS GOMR has determined, pursuant to 43 CFR 2.13(c)(9), that all of the items listed under Geological and Geophysical Information in this Appendix may be considered proprietary, except for the non-proprietary assessment in Item (E).

Your EP should be accompanied by:

(A) Structure contour maps. Current structure contour maps at a scale of 1 inch = 2,000 feet (depth-based, expressed in feet subsea) drawn on the top of each prospective hydrocarbon sand, showing the entire lease block and the location of each proposed well and the locations of geological cross-sections. You may use another scale or coverage area for these contour maps on a case-by-case basis if your proposed activities cover more than one lease block and if you obtain prior approval from the Regional Supervisor. (Examples of acceptable structure contour maps can be found on the MMS Internet website at

<http://www.gomr.mms.gov/homepg/regulate/regs/ntls/structmap1.pdf> and <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/structmap2.pdf>.)

(B) Interpreted two-dimensional (2-D) and/or three-dimensional (3-D) seismic lines. Page-size copies of migrated and annotated (shot points, time lines, well paths) 2-D and/or 3-D seismic lines within 500 feet of the surface locations of your proposed wells. Provide this information as an enclosure to one proprietary copy of your EP. You do not need to provide this information if the MMS GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.

(C) Geological structure cross-sections. Interpreted geological structure cross-sections showing the location and depth of each proposed well. In addition, show at least one key horizon and the objective sands and label them using standard biostratigraphic terms. Express all depths in feet. (An example of an acceptable geological structure cross-section may be found on the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/xsection.pdf>.)

(D) Shallow hazards report. If your proposed activities are in water depths less than 400 meters, provide two copies of a shallow hazard report based on information obtained from a high-resolution geophysical survey, or a reference to such report if you have already submitted it to the Regional Supervisor. If your proposed activities are in water depths of 400 meters or more, provide three copies of the report. If the report covers multiple leases, provide a listing. Refer to NTL No. 98-20, "Shallow Hazards Requirements," dated September 15, 1998, for guidelines.

(E) Shallow hazards assessment. For each proposed well at an unapproved surface location, an assessment of any seafloor and subsurface geological and manmade features and conditions that may adversely affect your drilling operations, prepared using the guidance in NTL No. 98-20. For wells you propose at MMS-approved surface locations, include a statement to this effect in lieu of an assessment. Include a non-proprietary version of this item in the Public Information copies of those EP's that require Coastal Zone Management consistency.

(F) High-resolution seismic lines. Annotated (shot points, time lines, well surface locations, and proximity of wells to line) copy of the high-resolution survey line (shallow

penetration subbottom profiler; medium penetration seismic profiler; and sidescan sonar in areas of complex seafloor such as fault scarps, mud mounds, mud lobes) closest to each of the proposed well locations. Provide this information as an enclosure to one proprietary copy of your EP. You do not need to provide this information if the MMS GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.

For deepwater areas, you may replace the high-resolution survey lines with 3-D survey information on a case-by-case basis if you submit the following displays: swath bathymetry/seafloor rendering/edge detection (fault scarp trends) overlain with the seafloor amplitude. However, the vertical resolution of the 3-D surveys is usually not sufficient to detect potential drilling hazards in a complex area (numerous faults, gas vents, slumps, hard bottoms, etc.). Therefore, in a complex area, you may *not* replace high-resolution survey lines with 3-D survey information. However, in deepwater areas, you do not need to provide sidescan sonar in water depths greater than 300 meters or magnetometer lines in water depths greater than 200 meters if you obtain the prior approval of the Regional Supervisor on a case-by-case basis.

(G) Stratigraphic column. A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of each prospect. Label objective horizons on the column. (An example of an acceptable stratigraphic column may be found on the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/stratcolumn.pdf>.)

(H) Time vs. depth tables. For proposed well locations in areas where there is no well control, seismic travel time versus depth tables showing intervals of not more than 10 milliseconds.

Your DOCD should be accompanied by:

(A) Structure contour maps. Current structure contour maps at a scale of 1 inch = 2,000 feet (depth-based, expressed in feet subsea) drawn on the top of each productive hydrocarbon sand, showing the entire lease block and the location of each proposed well and the locations of geological cross-sections. You may use another scale or coverage area for these contour maps on a case-by-case basis if your proposed activities cover more than one lease block and if you obtain prior approval from the Regional Supervisor. (See MMS Internet websites previously referenced for examples.)

(B) Interpreted two-dimensional (2-D) and/or three-dimensional (3-D) seismic lines. Page-size copies of migrated and annotated (shot points, time lines, well paths) 2-D and/or 3-D seismic lines within 500 feet of the surface locations of your proposed wells. Provide this information as an enclosure to one proprietary copy of your DOCD. You do not need to provide this information if the MMS GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.

(C) Geological structure cross-sections. Interpreted geological structure cross-sections showing the location and depth of each proposed well. In addition, show at least one key horizon and the objective sands and label them using standard biostratigraphic terms. Express all depths in feet. (See MMS Internet website previously referenced for example.)

(D) Shallow hazards report. If your proposed activities are in water depths less than 400 meters (1,312 feet), provide two copies of a shallow hazard report based on information obtained from a high-resolution geophysical survey, or a reference to such report if you have already

submitted it to the Regional Supervisor. If your proposed activities are in water depths of 400 meters (1,312 feet) or more, provide three copies of the report. If the report covers multiple leases, provide a listing. Refer to NTL No. 98-20, "Shallow Hazards Requirements," dated September 15, 1998, for guidelines.

(E) Shallow hazards assessment. For each proposed well or platform at an unapproved surface location, an assessment of any seafloor and subsurface geological and manmade features and conditions that may adversely affect your operations, prepared using the guidance in NTL No. 98-20. For wells or platforms you propose at MMS-approved surface locations, include a statement to this effect in lieu of an assessment. Include a non-proprietary version of this item in the Public Information copies of those DOCD's that require Coastal Zone Management consistency.

(F) High-resolution seismic lines. Annotated (shot points, time lines, well surface locations, and proximity of wells to line) copy of the high-resolution survey line (shallow penetration subbottom profiler; medium penetration seismic profiler; and sidescan sonar in areas of complex seafloor such as fault scarps, mud mounds, mud lobes) closest to each of the proposed well locations. Provide this information as an enclosure to one proprietary copy of your DOCD. You do not need to provide this information if the MMS GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.

For deepwater areas, you may replace the high-resolution survey lines with 3-D survey information on a case-by-case basis if you submit the following displays: swath bathymetry/seafloor rendering/edge detection (fault scarp trends) overlain with the seafloor amplitude. However, the vertical resolution of the 3-D surveys is usually not sufficient to detect potential drilling hazards in a complex area (numerous faults, gas vents, slumps, hard bottoms, etc.). Therefore, in a complex area, you may *not* replace high-resolution survey lines with 3-D survey information. However, in deepwater areas, you do not need to provide sidescan sonar or magnetometer lines if you obtain the prior approval of the Regional Supervisor on a case-by-case basis.

Hydrogen Sulfide (H₂S) Information

The MMS GOMR has determined, pursuant to 43 CFR 2.13(c)(9), that none of the items listed under Hydrogen Sulfide (H₂S) Information in this Appendix may be considered proprietary, except for any reference to correlative stratigraphic sections.

Your EP should be accompanied by:

(A) Classification. According to 30 CFR 250.490(c), a request that the Regional Supervisor classify the area of your proposed exploration activities as either H₂S absent, H₂S present, or H₂S unknown. Provide sufficient information (including reference to correlative stratigraphic sections) to justify your request.

(B) H₂S Contingency Plan. If you request that the Regional Supervisor classify the area of your proposed exploration activities as either H₂S present or H₂S unknown, include a reference to an approved or submitted H₂S Contingency Plan prepared according to 30 CFR 250.490(f) that covers the proposed exploration activities. If you have not yet submitted an H₂S Contingency Plan, include the following statement: “[*Company name*] will submit to the appropriate MMS GOMR district office an H₂S Contingency Plan prepared according to 30 CFR 250.490(f) before conducting the proposed exploration activities.”

Your DOCD should be accompanied by:

(A) Classification. According to 30 CFR 250.490(c), a request that the Regional Supervisor classify the area of your proposed development and production activities as either H₂S absent, H₂S present, or H₂S unknown. Provide sufficient information (including reference to correlative stratigraphic sections) to justify your request.

(B) H₂S Contingency Plan. If you request that the Regional Supervisor classify the area of your proposed development and production activities as either H₂S present or H₂S unknown, include a reference to an approved or submitted H₂S Contingency Plan prepared according to 30 CFR 250.490(f) that covers the proposed development and production activities. If you have not yet submitted an H₂S Contingency Plan, include the following statement: “[*Company name*] will submit to the appropriate MMS GOMR district office an H₂S Contingency Plan prepared according to 30 CFR 250.490(f) before conducting the proposed development and production activities.”

APPENDIX D BIOLOGICAL AND PHYSICAL INFORMATION

Chemosynthetic Information

Your EP or DOCD should be accompanied by:

If you propose activities that could disturb seafloor areas in deepwater (water depths 400 meters or greater), the maps, analysis, and statement(s) prepared by using the guidance in Attachment B of NTL No. 2000-G20, "Deepwater Chemosynthetic Communities," issued December 6, 2000.

Topographic Features Information

Your EP or DOCD should be accompanied by:

(A) Plat. If you propose to use a semisubmersible drilling rig and any of the associated anchors are to be placed within 500 feet of the no-activity zone of an identified topographic feature, a plat that depicts bathymetry, the no-activity zone of the topographic feature, the surface location of each proposed well or platform, and the position of anchors and chains relative to each proposed surface location.

(B) Statement. If you propose to drill more than two exploration wells from the same surface location and that surface location is within the 3-mile zone of an identified topographic feature, a statement that you will shunt all drill cuttings and drilling fluids from your drilling operations to the bottom through a downpipe that terminates an appropriate distance, but no more than 10 meters, from the bottom.

Be advised the topographic features information requirements outlined in this Appendix do not modify or cancel the requirements set forth in the Topographic Features Lease Stipulation. For a list of OCS blocks affected by this stipulation, see NTL No. 98-12, "Implementation of Consistent Biological Stipulation Measures in the Central and Western Gulf of Mexico," issued August 10, 1998.

Be further advised that the MMS and the National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) have entered into a programmatic consultation agreement for Essential Fish Habitat that requires that no bottom-disturbing activities, including anchors or cables from a semisubmersible drilling rig, may occur within 500 feet of the no-activity zone of an identified topographic feature. If you propose bottom-disturbing activities within 500 feet of a no-activity zone, the MMS is required by the agreement to consult with NOAA Fisheries. This could extend the time necessary to complete the review of your EP or DOCD.

Live Bottom (Pinnacle Trend) Information

Your EP or DOCD should be accompanied by:

If you propose bottom-disturbing activities, including anchors or cables from a semisubmersible drilling rig, within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet, a map at a scale of 1 inch = 1,000 feet with DGPS accuracy depicting the following:

- (A) Bathymetric contours at 2-foot intervals;
- (B) An outline of the pinnacles;
- (C) An annotation of the height of individual pinnacles;
- (D) The surface location of each proposed well or platform; and
- (E) The positions of anchors, chains, cables, and wire ropes relative to each proposed surface location.

You may use transparency overlays to other maps for the display of the Items (D) and (E) above, provided they are at a scale of 1 inch = 1,000 feet.

Be advised the Live Bottom (Pinnacle Trend) information requirements outlined in this Appendix do not modify or cancel the requirements set forth in the Live Bottom (Pinnacle Trend) Lease Stipulation. The OCS blocks affected by this stipulation are Main Pass Area, Blocks 190, 194, 198, 219-226, 244-266, 276-290; and Viosca Knoll Area, Blocks 473-476, 521, 522, 564-566, 609, 610, 654, 692-698, 734, and 778.

Be further advised that the MMS and the National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) have entered into a programmatic consultation agreement for Essential Fish Habitat that relates to bottom-disturbing activities occurring within 100 feet of any Pinnacle Trend feature with vertical relief greater than or equal to 8 feet. If you propose bottom-disturbing activities, including anchors or cables from a semisubmersible rig, within 100 feet of any Pinnacle Trend feature with vertical relief greater than or equal to 8 feet, the MMS will consult with NOAA Fisheries pursuant to the agreement. This could extend the time necessary to complete the review of your EP or DOCD.

Live Bottoms Report

Your EP or DOCD should be accompanied by:

If you have the Live Bottom Stipulation (Eastern Gulf of Mexico Planning Area) attached to your lease, five copies of the report described in NTL No. 99-G16, "Live-Bottom Surveys and Reports," dated July 8, 1999.

Remotely Operated Vehicle (ROV) Surveys

Your EP or DOCD should be accompanied by:

If you propose activities that could disturb seafloor areas in deepwater (water depths 400 meters (1,312 feet) or greater), an ROV survey plan prepared according to the guidance in NTL No. 2003-G03, "Remotely Operated Vehicle Surveys in Deepwater," effective January 23, 2003.

Archaeological Information

Your EP or DOCD should be accompanied by:

If you propose bottom-disturbing activities in areas that have been identified as High Probability Shipwreck blocks or prehistoric areas, three copies of an archaeological report or a reference to such a report if it has already been provided to the Regional Supervisor. Refer to NTL No. 2002-G01, "Archaeological Surveys and Reports," effective March 15, 2002, for guidelines.

APPENDIX E WASTES AND DISCHARGES INFORMATION

Your EP and DOCD should be accompanied by:

(A) **Discharges**. For *discharges*, the type and general characteristics of the wastes, the amount to be discharged (volume or rate), the maximum discharge rate, a description of any treatment or storage, and the discharge location and method for each type of discharge. We recommend that you provide this information in a tabular format. Refer to the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/wastables.pdf> for suggested format and examples.

For the purpose of this Appendix, the term *discharges* describe those wastes generated by your proposed activities that you dispose of by releasing them into the waters of the Gulf of Mexico at the site where they are generated, usually after receiving some form of treatment before they are released, and in compliance with applicable NPDES permits or State requirements.

Provide this *discharges* information only when you propose:

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank. (The OCS blocks in the Protective Zones include High Island Blocks A-351 through A-355, A-361 through A-368, A-373 through A-381, A-382 through A-390, A-394 through A-400, A-401 through A-403, A-486 through A-488, A-501 through A-503, A-512 through A-514, A-527 through A-529, A-573, and A-596; Garden Banks Blocks 133 through 136, 138 through 140, and 177 through 180; and East Breaks Blocks 173 and 217.)
3. To use new or unusual technology that changes the nature or size of the waste stream.
4. Deepwater development operations. (You may omit this information if you propose operations in an exempted area. Refer to the MMS Internet website at http://www.gomr.mms.gov/homepg/regulate/environ/ea_grid/ea_grid.asp for a current depiction of exempted areas.)
5. An initial EP, initial DOCD, or supplemental DOCD with new multiwell structures for which the State of Texas is an affected State (15 CFR 930.58(a)(2)).
6. An initial or supplemental EP or DOCD for which the State of Alabama is an affected State (15 CFR 930.58(a)(2)).

(B) **Disposed wastes**. For *disposed wastes*, the type and general characteristics of the wastes, the amount to be disposed of (volume, rate, or weight), the daily disposal rate, the name and location of the disposal facility, a description of any treatment or storage, and the methods for transporting and final disposal. We recommend that you provide this information in a tabular format. Refer to the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/wastetables.pdf> for suggested format and examples.

For the purpose of this Appendix, *disposed wastes* describes those wastes generated by your proposed activities that are disposed of by means other than by releasing them into the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

APPENDIX F OIL SPILL INFORMATION

Under 30 CFR 250.203(b)(2) and 30 CFR 250.204(b)(3), an EP and DOCD must include an oil spill response plan (OSRP) or reference to an approved regional OSRP (referred to as a sub-regional OSRP in the Eastern Planning Area) prepared according to 30 CFR 254. In the MMS GOMR, it is usually expedient for you to submit for approval a regional or subregional OSRP that covers all of your OCS leases and facilities. You may then reference your approved regional or subregional OSRP in your EP's and DOCD's. If you choose to provide a site-specific OSRP for the facilities you will use to conduct your proposed activities instead of referencing a regional or subregional OSRP, prepare it according to 30 CFR 254.21 through 254.29. For EP's and DOCD's proposing activities in the Eastern Planning Area, provide either a site-specific OSRP or reference an approved sub-regional OSRP.

If you reference your approved regional or subregional OSRP, your EP or DOCD should be accompanied by:

(A) Statement. A statement that the activities proposed in your EP or DOCD will be covered by your approved regional or subregional OSRP.

(B) OSRO information. The name(s) of your oil spill removal organization(s) (OSRO) for both equipment and personnel.

(C) Worst-case scenario comparison. If you have an approved regional or subregional OSRP, a comparison of the appropriate worst-case scenario from your approved regional or subregional OSRP to the worst-case scenario from the proposed activities in your EP or DOCD. Refer to the sample chart below. Use this comparison to aid you in determining whether the worst-case scenario from your approved regional or subregional OSRP is superseded by the worst-case scenario from the proposed activities in your EP or DOCD. For EP's, because estimated flow rates from a blowout are speculative, you should not determine that the worst-case scenario from your proposed activities supersedes your worst-case scenario from your approved regional or subregional OSRP as long as your contracted OSRO capabilities are sufficient to respond to the worst-case volume in your EP unless the volume is substantially larger. (Reminder: In making this determination, also consider proximity to beaches, waterfowl, other marine and shoreline resources, and areas of special economic or environmental importance as required in your approved regional or subregional OSRP.)

Category	Regional or Subregional OSRP	EP or DOCD
Type of Activity ¹	Production – Subsea completion	Development – Platform drilling rig
Facility Location (area/block)	EI 250	MC 900
Facility Designation ²	Well No. 2	Rio Loco Project
Distance to Nearest Shoreline (miles)	45 miles	160 miles
Volume ³		
Storage tanks (total)	0 bbls	200 bbls
Flowlines (on facility)	40 bbls	15 bbls
Lease term pipelines	1,600 bbls	400 bbls
Uncontrolled blowout (volume per day)	2,700 bbls	600 bbls
Total Volume	4,665 bbls	1,215 bbls
Type of Oil(s) - (crude oil, condensate, diesel)	Crude oil	Crude oil
API Gravity(s) ⁴	37°	37°

1. Types of activities include pipeline, platform, caisson, subsea completion or manifold, and mobile drilling rig.
2. E.g., Well No. 2, Platform JA, Pipeline Segment No. 6373.
3. Take your worst-case scenario volume from the appropriate section of your regional or subregional OSRP. For EP's, the worst-case scenario volume is the daily volume possible from an uncontrolled blowout. Determine this volume using the provisions of 30 CFR 254.47(b). For DOCD's, determine the volume of your worst-case scenario using the provisions of 30 CFR 254.47 (a) or (b), as appropriate.
4. Provide API gravity of all oils given under "Type of Oil(s)" above. Estimate for EP's.

If your proposed activities are within 10 miles seaward of the coastline, you must reference the "near-shore" worst-case scenario provided in your approved regional or subregional OSRP. If your proposed activities are beyond 10 miles seaward of the coastline, reference the "far-shore" worst-case scenario provided in your approved regional or subregional OSRP.

If you determine that the worst-case scenario from the activities proposed in your EP or DOCD supersedes the worst-case scenario from your approved regional or subregional OSRP, modify your approved regional or subregional OSRP to incorporate this new worst-case scenario and provide the following statement:

(Name of company) submitted the new worst-case scenario to the MMS GOMR on *(date)* for inclusion in our *(regional or subregional)* OSRP.

The EP or DOCD will not be approved until the MMS GOMR has received and approved your regional or subregional OSRP worst-case scenario modification.

If you determine that the worst-case scenario from the activities proposed in your EP or DOCD does not supersede the worst-case scenario in your approved regional or subregional OSRP, provide the following statement:

Since *(name of company)* has the capability to respond to the worst-case spill scenario included in its *(regional or subregional)* OSRP approved on *(date)*, and since the worst-case scenario determined for our *(EP or DOCD)* does not replace the worst-case scenario in our *(regional or subregional)* OSRP, I hereby certify that *(name of company)* has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our *(EP or DOCD)*.

If you reference your approved regional or subregional OSRP or if you choose to include a site-specific OSRP, your EP or DOCD should be accompanied by:

(A) **Facility tanks, production vessels.** Information on tanks and/or production vessels at the facility (including barges, drilling rigs, platform, etc.) that will store oil, as defined at 30 CFR 254.6. Refer to the sample chart below. List only those tanks with a capacity of 25 barrels or more.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil	Semi-submersible	250	2	500	No. 2 Diesel
Production	Platform A	40,000	2	80,000	37°

(B) Spill response sites. Information on the location of your primary spill response equipment and the location of your pre-planned staging area(s) that would be used in the event you have an oil spill resulting from the activities proposed in your EP or DOCD. Refer to the following sample chart.

Primary Response Equipment Location	Preplanned Staging Location(s)
Houma, LA	Fourchon, LA, Grand Isle, LA

Provide this chart only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).
5. Initial EP's and DOCD's and supplemental DOCD's with new multiwell structures for which the State of Texas is an affected State (15 CFR 930.58(a)(2)).

(C) Diesel oil supply vessels. Information on the diesel oil supply vessels you will use. Include any transfers of diesel oil used for purposes other than fuel (e.g., base for corrosion control fluids). Refer to the following sample chart.

Size of Fuel Supply Vessel	Capacity of Fuel Supply Vessel	Frequency of Fuel Transfers	Route Fuel Supply Vessel Will Take
180 feet	1,500 bbls	Weekly	From the shorebase in Fourchon, LA, to XYZ Field, then to WC Block 134

Provide this chart only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial and supplemental DOCD's for which the State of Alabama is an affected State (15 CFR 930.58(a)(2)).
5. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).

(D) Support vessels fuel tanks. The estimated total storage capacity (maximum per class of vessel in the field at any given time) of the fuel tanks on the supply, service, or crew vessels you will use to support the activities proposed in your EP or DOCD. Refer to the following sample chart:

Type of Vessel	Number in Field Simultaneously	Estimated Maximum Fuel Tank Storage Capacity
Tug boats*	2	3000 bbls
Supply vessels	2	500 bbls
Service vessels	1	500 bbls
Crew vessels	1	500 bbls

* Includes anchor-handling vessels, construction barges, lay barges, etc.

Provide this chart only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial and supplemental DOCD's for which the State of Alabama is an affected State (15 CFR 930.58(a)(2)).
5. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).

(E) Produced liquid hydrocarbons transportation vessels. If liquid hydrocarbons (including well test fluids) will be transported by means other than a pipeline, the transportation method, a description of the method to be used to transfer the liquid hydrocarbons to the transporting vessel, the capacity of the transporting vessel(s), the expected average volume of liquid hydrocarbons that will be loaded onto the transporting vessel, and the average number of transfers that will take place each year.

(F) Oil- and synthetic-based drilling fluids. The components, chemical composition, and projected amounts and rates of usage of each oil- or synthetic-based drilling fluid you will use to drill your proposed wells. Refer to the following sample chart.

Type of Drilling Fluid	Estimated Volume of Mud Used per Well	Mud Disposal Method	Estimated Volume of Cuttings Generated per Well	Cuttings Disposal Method
Oil-based	500 bbls	Onshore disposal	1,000 bbls	Onshore disposal
Synthetic-based	20,000 bbls	Recycle	18,000 bbls	Discharge

Provide this chart only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).
5. Initial EP's and DOCD's and supplemental DOCD's with new multiwell structures for which the State of Texas is an affected State (15 CFR 930.58(a)(2)).

(G) Oils characteristics. For DOCD's only, the estimated chemical and physical characteristics of the oils that will be handled, stored, or transported on/by the facility. Refer to the following sample chart.

Characteristic	Analytical Methodologies Should Be Compatible with:
1. Gravity (API)	ASTM D4052
2. Flash Point (°C)	ASTM D93/IP 34
3. Pour Point (°C)	ASTM D97
4. Viscosity (Centipoise at 25 °C)	ASTM D445
5. Wax Content (wt %)	Precipitate with 2-butanon/dichloromethane (1 to 1 volume) at -10 °C

6. Asphaltene Content (wt %)	IP-Method 143/84
7. Resin Content (wt %)	Jokuty et al., 1996
8. Boiling point distribution including, for each fraction, the percent volume or weight and the boiling point range in °C	ASTM D2892 (TBP distillation) or ASTM D2887/5307
9. Sulphur (wt %)	ASTM D4294

Note: If the distillation information in Item No. 8 in the above table is not available, the MMS GOMR may accept the following information in lieu of Items Nos. 5, 6, 7, and 8: weight percent total of saturates, aromatics, waxes, asphaltenes, and resins; and total BTEX (ppm) using analytical methods compatible with the Hydrocarbon Groups methodology found in Jokuty et al. (1996).

Provide information on the oil composition that is most likely to result in the largest volume spill (e.g., the oil from the expected largest reservoir, stored oil or pipeline oil combined from a number of wells).

Identify the oil you analyze. Refer to the following sample chart.

Oil from One Well	Oil from More than One Well Sampled on a Facility	Oil from a Pipeline System
<ul style="list-style-type: none"> · Area/Block · MMS platform ID · API Well No. · Completion perforation interval · MMS's reservoir name · Sample date · Sample No. (if more than one is taken) 	<ul style="list-style-type: none"> · Area/Block · MMS platform ID · Field/Unit · Sample date · Sample No. (if more than one is taken) · Listing of API Well Nos. · Storage tank ID No. (if sampled at a storage tank) 	<ul style="list-style-type: none"> · Pipeline segment number · For each pipeline that feeds into the system, the ID codes for the closest upstream LACT units and/or facility measurement points · Storage tank ID No. (if sampled at a storage tank)

Provide these charts only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).

(H) Blowout scenario. A scenario for a potential blowout. Include an estimated spill flow rate, volume, and timeframe associated with a potential blowout of the well you expect to have the highest volume of liquid hydrocarbons. Include also the potential for the well to bridge over, the likelihood for surface intervention to stop the blowout, the availability of a rig to drill a relief well, rig package constraints, and the estimated time to drill a relief well.

Provide this information only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).

(I) Spill response discussion. A discussion of your response to a spill originating from the proposed operation. The discussion should include as much of the information described in 30 CFR 254.26(d) as is applicable. As the source of the spill, use whichever of the following

gives the greater volume of oil:

- (1) The blow-out scenario from Item H above, or
- (2) The volume of the largest oil/fuel storage tank on the drilling rig or facility.

Provide this discussion only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).
5. Initial EP's and DOCD's and supplemental DOCD's with new multiwell structures for which the State of Texas is an affected State (15 CFR 930.58(a)(2)).

(J) Pollution prevention measures. A discussion of the safety, pollution prevention, and early spill detection measures that you will take beyond those required by 30 CFR 250.

Provide this discussion only when you propose

1. Activities in the Eastern Planning Area of the GOM.
2. Activities within the Protective Zones of the Flower Garden Banks and Stetson Bank.
3. To install a surface facility located in water depths greater than 400 meters (1,312 feet), or a surface facility in any water depth that supports a subsea development in water depths greater than 400 meters (1,312 feet).
4. Initial DOCD's and supplemental DOCD's with new multiwell structures for which the State of Louisiana is an affected State (15 CFR 930.58(a)(2)).
5. Initial EP's and DOCD's and supplemental DOCD's with new multiwell structures for which the State of Texas is an affected State (15 CFR 930.58(a)(2)).

(K) FGBNMS monitoring plans. If you propose activities within the Protective Zones of the Flower Garden Banks and Stetson Bank, a discussion of your provisions for monitoring the impacts of an oil spill on the environmentally sensitive resources at the Flower Garden Banks National Marine Sanctuary.

APPENDIX G AIR EMISSIONS INFORMATION

If any of the activities proposed in your EP or DOCD take place at the site of an existing facility or well, two different emission calculations are necessary. The calculated emissions that are associated with the activities proposed in the current EP or DOCD submission are referred to as Plan Emissions. Complex Total Emissions are the Plan Emissions plus projected emissions from all existing co-located facilities and activities (i.e., those that are at the same surface location as your proposed activities, including any group of installations interconnected with walkways and/or bridges). If there are no existing facilities or activities co-located with your currently proposed activities, then state that the Complex Total Emissions are the same as the Plan Emissions, and therefore only one set of emissions calculations is included.

Your EP and DOCD should be accompanied by:

(A) Calculating emissions. Calculation of the Plan Emissions associated with your proposed activities (and the Complex Total Emissions, if applicable) using the methodology, emission factors, and worksheets in Form MMS-138 for EP's and Form MMS-139 for DOCD's. These forms are on the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/environ/airquality/reporting.html>. Depending on your answers to the screening questions in paragraph (B) below, you may need to include the worksheets in your EP or DOCD. In calculating your Plan Emissions and Complex Total Emissions:

(1) You may base the emissions on the maximum rated capacity of the equipment associated with your activities or by using emission reduction measures or modified emission factors. However, please be advised that if you base your emissions calculations on the use of emission reduction measures or modified emission factors, you will need to submit the worksheets and the documentation described in paragraphs (C) and/or (D) below.

(2) If you have not determined the specific drilling unit you will use, use the maximum emission estimates for the *type* of drilling unit (i.e., jack-up, platform rig, barge, submersible, semisubmersible, or drillship) in your calculations. You can find the maximum emission estimates for each drilling unit type on the MMS Internet website at <http://www.gomr.mms.gov/homepg/regulate/environ/airquality/reporting.html>.

(B) Screening questions. Using one of the two formats below, as appropriate, answers to questions regarding your calculated air emission amounts for EP's and DOCD's.

Screening Questions for EP's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?		
Do your emission calculations include any emission reduction measures or modified emission factors?		
Are your proposed exploration activities located east of 87.5° W longitude?		
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?		
Do you propose to burn produced hydrocarbon liquids?		

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?		
Do your emission calculations include any emission reduction measures or modified emission factors?		
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?		
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		
Do you propose to burn produced hydrocarbon liquids?		
Are your proposed development and production activities located within 25 miles from shore?		
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?		

In calculating CT for addressing the first question in the above tables, express the distance to shore (D) in tenths of a statute mile for distances up to 20 miles and in whole statute miles for distances 20 miles and beyond. Use the nearest point of any land, which is the distance from the facility complex to the mean high water mark of any State, including barrier islands and shoals, to determine the distance to shore.

(1) If you answer **no** to all of the above screening questions from the appropriate table, provide:

(a) Summary information regarding the peak year emissions for both Plan Emissions and Complex Total Emissions, if applicable. This information is compiled on the summary form of the two sets of worksheets. You can submit either these summary forms or use the format below. You do not need to include the entire set of worksheets.

Air Pollutant	Plan Emission Amounts ¹ (tons)	Calculated Exemption Amounts ² (tons)	Calculated Complex Total Emission Amounts ³ (tons)
Carbon monoxide (CO)			
Particulate matter (PM)			
Sulphur dioxide (SO ₂)			
Nitrogen oxides (NO _x)			
Volatile organic compounds (VOC)			

¹ For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.

² List the exemption amounts for your proposed activities calculated by using the formulas in 30 CFR 250.303(d).

³ List the complex total emissions associated with your proposed activities calculated from the worksheets.

(b) The name, telephone number, and e-mail address of the person(s) who calculated the projected Plan Emissions, Complex Total Emissions, and exemption amounts.

(c) Following your submittal of the summary information, the MMS GOMR may require you to submit the entire set of worksheets regardless of your response to the above screening questions. The MMS GOMR will make this determination on a case-by-case basis.

(2) If you answer **yes** to any of the above screening questions from the appropriate table, provide:

(a) A set of worksheets showing the emission calculations for your Plan Emissions and, if applicable, a second set showing the emission calculations for the Complex Total Emissions.

(b) The name, telephone number, and e-mail address of the person(s) who calculated the projected Plan Emissions, Complex Total Emissions, and exemption amounts.

In addition, if the screening results indicate that you are to submit worksheets, you may need to submit one or more of the following:

(C) Emission reduction measures. If your calculation of the projected Plan Emissions or Complex Total Emissions amounts includes emissions reduction measures, your worksheets and, using the format below, a description of the emission reduction measures. You may use actual fuel usage information (e.g., run times, fuel consumption) for the existing co-located facilities and activities. If you do, provide 6 to 12 months of data for determining the average fuel usage. The actual fuel usage you use in the emissions calculations cannot be less than the average fuel usage.

Emission Source	Reduction Control Method	Amount of Reduction	Monitoring System
Compressor	Clean burn technology	100 tons NO _x /year	Periodic stack test
Prime mover	Low sulphur fuel	10 tons SO ₂ /year	Visual check of fuel color and fuel receipts
Prime mover	Actual Fuel Consumption	300 tons NO _x /year	Fuel Log
Generator	Actual Run Time	100 tons NO _x /year	Run Time Log

(D) Verification of non-default emission factors. If you use any air emission factors less than the default values in your calculation of the projected Plan Emission or Complex Total Emissions amounts, documentation supporting the use of the smaller emission factors. However, if the actual emission factor is known to be greater than the default emission factor, use the actual emission factor.

(E) Non-exempt activities. If the calculated complex emission amount for any pollutant (CO, PM, SO₂, NO_x, or VOC) is greater than the respective emission amount, E, you calculated using the formulas $E = 3400D^{2/3}$ for CO and $E = 33.3D$ for the other air pollutants (i.e., the formulas in 30 CFR 250.303(d)), a description of how you will comply with 30 CFR 250.303(e) through (i), as appropriate.

(F) Review of activities with emissions below the exemption amount. If the calculated Complex Total Emission amount for any pollutant (CO, PM, SO₂, NO_x, or VOC) is greater than the respective emission amount "CT" you calculate using the formulas: $CT=3400D^{2/3}$ for CO and $CT=33.3D$ for the other air pollutants, according to 30 CFR 250.303(j), the MMS GOMR has determined that the otherwise exempt activities described in your EP or DOCD have the potential to significantly affect the air quality of an onshore area. In this case, use an MMS-approved air quality model to model the calculated Complex Total Emission amount for that pollutant(s) and provide the results. If your modeling indicates that the calculated Complex Total Emission amount from that complex would significantly affect the air quality of an onshore area (see 30 CFR 303(f)), provide a discussion of how you will comply with the applicable requirements of 30 CFR 250.303(g), (h), and (i). If you are unsure of how to do this, or believe your facility would not have a significant impact upon any onshore area, please contact the MMS

GOMR to discuss your modeling results and your options.

(G) Modeling report. If you are required by 30 CFR 250.303 to use an MMS-approved air quality model to model projected air emissions, adhere to the guidelines in Appendix W of 40 CFR 51 in conducting the modeling and preparing the report. Provide two copies of the modeling report and the modeling results, along with a digital copy (in ASCII format) of the input and output files (including the meteorological data you used in the modeling), or a reference to the report, files, and results if they have already been submitted to the MMS GOMR.

APPENDIX H ENVIRONMENTAL IMPACT ANALYSIS (EIA)

Your EP or DOCD should be accompanied by an environmental impact analysis (EIA) of the potential direct and indirect environmental impacts of your proposed activities as follows:

(A) Impact-producing factors (IPF's). Identification of the impact producing factors (IPF) from your proposed activities. Determine the environmental resources that could be impacted by these IPF's. To assist you in determining the IPF's, you may use the worksheet at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/EIAWorksheet.pdf>.

(B) Analysis. For those environmental resources you have determined may be impacted, a detailed explanation of the expected environmental impacts to the resource caused by each IPF. If the resource in question is beyond the reach of any impact from your proposed activities, briefly explain your rationale. Focus every analysis on the site-specific environmental impacts of the proposed activities. Do not repeat the generalized impacts described in lease sale environmental impact statements (EIS). In your analyses, address the degree of impact, result of impact, duration of impact, recovery time for resource, and degree of recovery. Make sure the write-up for each environmental resource has its own heading (e.g., topographic features, fisheries, etc.). If you conducted any study in preparing your EP or DOCD or to comply with a Federal or State agency requirement, describe the nature of the study and its findings.

(C) Impacts on your proposed activities. A discussion of the potential impacts on your proposed activities that could result from environmental conditions in the project area (e.g., currents, geohazards). Such environmental conditions may increase the risk of an accident that could cause impacts to environmental resources.

(D) Alternatives. A discussion of any alternatives that you considered to reduce the environmental impacts of your proposed activity. Describe how each alternative would result in a change in the environmental impact of your proposed activity. If you conducted studies in the development of your alternatives, describe the nature of the studies and their findings.

(E) Mitigation measures. A description of any mitigation that you will employ to avoid, diminish, or eliminate potential impacts on these environmental resources and explain the effectiveness of this mitigation in terms of duration and recovery that might be expected relative to the resource.

(F) Consultation. A list of agencies and persons you consulted regarding potential impacts associated with your proposed activities.

(G) References. A list of the references you cite in the EIA. Summarize all information you incorporate by reference.

APPENDIX I COASTAL ZONE MANAGEMENT CONSISTENCY INFORMATION

The States of Texas, Louisiana, Mississippi, Alabama, and Florida have Federally approved coastal zone management programs (CZMP). The Coastal Zone Management Act (CZMA) places requirements on any applicant for an OCS plan that describes in detail Federal license or permit activities affecting any coastal use or resource, in or outside of a State's coastal zone. The applicant must provide in the OCS plan submitted to MMS a certification and necessary data and information for the State to determine that the proposed activities comply with the enforceable policies of the States' approved program, and that such activities will be conducted in a manner consistent with the program. (See 16 U.S.C. 1456(c)(3)(A) and 15 CFR 930.76.)

Except as provided in 15 CFR 930.60(a), State agency review of the consistency information begins when the State receives the OCS plan, consistency certification, and required necessary data and information. Only missing information can be used to delay the commencement of State agency review, and a request for information and data in addition to that required by 15 CFR 930.76 will not extend the date of commencement of review (15 CFR 930.58).

Even though you may have submitted CZM consistency information described in this Appendix, a State with an approved CZMP may request additional information, beyond "required necessary data and information" as described in the paragraph above, from you. Therefore, if you intend to submit an OCS plan, the MMS GOMR encourages you to consult with the appropriate State agency to ascertain whether it will request such additional or supplemental information. Such consultation may serve to expedite the coastal zone consistency determination (15 CFR 930.56).

As part of its assistance efforts, the State agency must make copies of their CZMP document available to you and provide you with guidance on satisfying the requirements of the State program and the development of consistency certification material. Subpart E of 15 CFR 930, "Consistency for Outer Continental Shelf (OCS) Exploration, Development and Production Activities," sets forth specific guidance concerning the implementation of Federal consistency provisions of the CZMA, including the responsibilities of lessees and operators, MMS, and the States.

Please be advised that the States of Louisiana and Alabama require a fee in order to process your certification. Information on fees required by the State of Louisiana can be found on the Internet at http://www.legis.state.la.us/tsrs/RS/49/RS_49_214_32.htm. Information on fees required by the State of Alabama can be found in Schedule B on the Internet at <http://www.adem.state.al.us/Regulations/Div1/D1Chapter%206.doc>

Your EP or DOCD should be accompanied by:

- (A) Consistency certification. A coastal zone consistency certification according to 15 CFR 930.76(c) and (d) for each affected State. A State is an affected State when:
- (1) Your activities are adjacent to a State as shown on the maps on the MMS Internet website at http://www.gomr.mms.gov/homepg/offshore/plans_permits/czmmaps.html;
 - (2) You propose to use a service or supply base within a State's coastal zone;
 - (3) You propose construction or expansion of an onshore base; or
 - (4) You propose to store or dispose solid and liquid wastes within a State's coastal zone.

Consistency certifications for activities that affect the States of Texas, Louisiana, Mississippi, Alabama, and Florida should approximate the format shown in Figure 1 of this Appendix.

(B) Other information. Information required by 15 CFR 930.76(b). This includes:

(1) A detailed description of the proposed activity, its associated facilities, the coastal effects, and comprehensive data and information sufficient to support your consistency certification. Submit maps, diagrams, technical data, and other relevant material when a written description alone will not adequately describe the proposal. You do not need to repeat or reference information you have provided elsewhere in your EP or DOCD.

(2) Information specifically identified in the State's management program (as originally approved or amended) as required necessary data and information (15 CFR 930.58). (Attachment 1 to this Appendix provides a cross-reference to certain information items that you may need to provide only because the various affected States have specifically identified the items as required necessary data and information for EP's and DOCD's subject to CZM Federal consistency review. You do not need to repeat or reference information you have provided elsewhere in your EP or DOCD.)

(3) An evaluation that includes a set of findings, relating the coastal effects of your proposed activities and their associated facilities to each of the relevant enforceable policies of the State's management program. (See the MMS website at <http://www.gomr.mms.gov/homepg/regulate/regs/ntls/enforpols.pdf> for information each Gulf of Mexico State provided MMS regarding their enforceable policies.) The NOAA-approved enforceable policies are identified in each State's CZMP. Identify the impacts as specifically as possible. For Texas, Mississippi, Alabama, and Florida, state if there are no effects on a particular policy. For Louisiana, state that you have considered all of Louisiana's enforceable policies in making your certification of consistency. When it appears that your proposed activities may not be fully consistent with one or more of Louisiana's enforceable policies, provide a brief statement that identifies the enforceable policy, explains the apparent inconsistency, and describes the measures you will take to ensure that your proposed activities will in fact be consistent. You do not need to make findings with respect to coastal effects for which the management program does not contain enforceable policies. Include discussions of the measures that you will take to avoid or mitigate the probable impacts. Include also an assurance of compliance with existing Federal and State laws, regulations, and resultant enforceable program policies in each affected State's CZMP.

Provide the information in paragraphs (A) and (B) above for all:

1. Initial EP's and DOCD's.
2. Supplemental EP's and DOCD's for which Florida and Alabama are affected States.
3. Supplemental DOCD's proposing new multi-well structures for which Louisiana, Mississippi, and Texas are affected States.
4. Revised EP's and DOCD's for which the MMS GOMR determines that the revisions could result in a significant change in the impacts previously identified and evaluated. (Refer to 30 CFR 250.203(n)(2) and 204(q)(2)).

Refer to the MMS Internet websites given in paragraphs (A)(1) and (B)(3) above for additional information and other special instructions.

Appendix I - Attachment 1

1. Texas

- (a) Wastes and Discharges Information listed in Appendix E. *(If you provided this information under the guidelines of Appendix E, you do not need to repeat or reference it.)*
- (b) Oil Spill Information listed in Appendix F. *(If you provided this information under the guidelines of Appendix F, you do not need to repeat or reference it.)*

2. Louisiana

- (a) A discussion of the method of disposal of any wastes you propose to dispose of within the Louisiana Coastal Zone, including State waters. If municipal, Parish, or State facilities are to be used, identify the specific facilities. *(If you provided this information under the guidelines of Appendix E, you do not need to repeat or reference it.)*
- (b) Oil Spill Information listed in Appendix F. *(If you provided this information under the guidelines of Appendix F, you do not need to repeat or reference it.)*

3. Mississippi

Wastes and Discharges Information listed in Appendix E. *(If you provided this information under the guidelines of Appendix E, you do not need to repeat or reference it.)*

4. Alabama

- (a) Wastes and Discharges Information listed in Appendix E. *(If you provided this information under the guidelines of Appendix E, you do not need to repeat or reference it.)*
- (b) Oil Spill Information listed in Appendix F. *(If you provided this information under the guidelines of Appendix F, you do not need to repeat or reference it.)*

5. Florida

Please note that if you have provided any of the following information under the guidelines of another Appendix, you do not need to repeat or reference it.

- (a) A discussion of the measures you will use to prevent the discharge of oils and greases from drilling rigs or platforms during rainfall and routine operations.
- (b) The following socioeconomic information:
 - (1) The estimated number of persons you expect to employ in support of your offshore, onshore, and transportation activities within the State of Florida, and where possible, the approximate number of new employees and families likely to move into the affected area;

- (2) An estimate of the major supplies, services, energy, water, or other resources you expect to purchase within the State of Florida and that are necessary for you to carry out the activities in your EP or DOCD; and
 - (3) The types of contractors or vendors within the State of Florida you will need to carry out the activities in your EP or DOCD.
- (c) A complete description of any dredging and filling activities associated with the construction or expansion of any onshore facilities in Florida you will use to support your proposed activities.
 - (d) The type and volume of chemical constituents of drilling muds you anticipate you will use.
 - (e) Detailed information on the presence of threatened and endangered species in the project area.
 - (f) A discussion of air and water quality in and adjacent to the area of your proposed activities or potential impact.
 - (g) A thorough description of the coastal habitats (including bays, bayous, sounds, estuaries, lagoons, rivers, streams, or other bodies of water) and their associated flora and fauna that could be affected by your proposed activities.
 - (h) A description of any historical and archaeological resources that could be affected by your proposed activities. Describe the measures you will use to protect these resources. Describe thoroughly the surveys you used to locate and identify these resources.
 - (i) A discussion of sensitive or critical State and Federal resources, including specially designated and managed areas, that may be impacted by the project (planned activities or accidental discharges).
 - (j) A description of the potential for and types of direct, indirect or secondary, and cumulative impacts of the project (planned activities and accidents) on air quality; water quality and quantity; marine and coastal habitats; flora and fauna (including threatened and endangered species); coastal littoral processes; publicly owned and managed lands; cultural or historic resources; recreational and commercial fisheries; communities; the state and local economy; navigation; marine productivity; and other uses of the area.
 - (k) A description of measures you will take to avoid, minimize, and mitigate impacts to marine and coastal environments and habitats, biota, and threatened and endangered species.
 - (l) Existing and planned monitoring that will measure environmental conditions, including but not limited to that required by lease stipulation.

Appendix I – Figure 1

Suggested consistency certification format for all EP's and DOCD's that affect the States of Texas, Louisiana, Mississippi, Alabama, and Florida.

**COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION**

Type of OCS Plan

Area and Block

Lease Number

The proposed activities described in detail in this OCS Plan comply with
[Name of State(s)] approved Coastal Management Program(s) and
will be conducted in a manner consistent with such Program(s).

Lessee or Operator

Certifying Official

Date

APPENDIX J
OCS PLAN INFORMATION FORM

For each EP or DOCD, complete form MMS-137, OCS Plan Information Form, and submit it with your EP or DOCD. This form will facilitate MMS data entry and review of your plan.

This form can be downloaded at from the MMS Internet website at <http://www.gomr.mms.gov/homepg/mmsforms/frmindx.html> or obtained from the MMS GOMR Public Information Office in New Orleans, Louisiana.