OMB Control Number: 1010-0049 OMB Expiration Date: September 30, 2003

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

NTL No. 2000-G21 Effective Date: December 26, 2000

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

# **Information Requirements for Exploration Plans and Development Operations Coordination Documents**

This Notice to Lessees and Operators (NTL) supersedes NTL 2000-G10, issued April 27, 2000, effective on May 30, 2000, and makes minor technical amendments, primarily to Appendix F. The following table summarizes the items affected by the changes:

NTL Part	Description of Change
General Requirements for EP's and DOCD's	Adds a statement in the third paragraph to encourage reference to the MMS control number in revised and supplemental OCS plans (if known).
General Requirements for EP's and DOCD's	In the fourth paragraph, amends the second and ninth reasons for revising an Exploration Plan (EP) or Development Operations Coordination Document (DOCD).
Appendix A	Eliminates the bottomhole location from the location maps in Item (B) for both EP's and DOCD's.
Appendix B	Adds "distance to shore in miles" in Item (D) for EP's and Item (F) for DOCD's. Adds information on production rates and life of reserves in a new Item (C) for DOCD's. Add new Items (H) and (I) to provide information on the workers associated with the activity and information on related facilities and operations, for use in preparing Grid Environmental Assessments.
Appendix C	Adds provision to show key horizons and objective sands in the geological structure cross-sections in Item (C) for both EP's and DOCD's.
Appendix D	Under "Chemosynthetic Information," makes reference to Attachment B of NTL No. 2000-G20 for guidance on providing information concerning chemosynthetic communities. Under "Topographic Features Information," adds an introductory paragraph regarding lease stipulation compliance. Adds a new section entitled "Live Bottom (Pinnacle Trend) Information."
Appendix F	Adds a quick reference table for oil and chemical information and makes numerous other changes. Eliminates the attachment to this appendix.
Appendix G	Emphasizes the statement that you use the maximum in class emissions if your actual drilling unit is unknown at the time of OCS plan submittal.
Appendix H	Clarifies the reference to Supplemental EP's and DOCD's in the last paragraph under Item II.A.1.b.

**Administrative** 

The Gulf of Mexico OCS Region (GOMR) will consider all comments you wish to make on the contents of this NTL that we receive by March 26, 2001. Mail or hand-carry comments to the Department of the Interior; Minerals Management Service; Gulf of Mexico OCS Region; 1201 Elmwood Park Boulevard; New Orleans, Louisiana 70123; Attention: Plans Section (MS 5230).

You should consider this NTL an interim guidance document on preparing EP's and DOCD's required by 30 CFR 250, Subpart B. The Minerals Management Service (MMS) is in the process of drafting revised Subpart B regulations. In connection with the proposed rulemaking, the MMS will be developing a National NTL that will supersede this interim NTL when the final regulations take effect.

### 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 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), under 30 CFR 250.203(n)(2) and 250.204(q)(2), the 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 need contain only that information related to or affected by the proposed revision. However, the description of the proposed revision should be complete and include 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 GOMR, revise your approved EP or DOCD when you propose to

1. Change the type of drilling rig, production facility, or transportation mode.

- 2. Change the surface location of a well 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. Change the type of production or substantially increase the volume of production or storage capacity.
- 4. Increase the emissions of an air pollutant to an amount that exceeds that in your approved OCS plan.
- 5. Substantially increase the amount of wastes to be handled or discharged.
- 6. Request a new hydrogen sulfide (H<sub>2</sub>S) area classification or encounter a concentration of H<sub>2</sub>S greater than 500 parts per million (ppm).
- 7. Change your onshore support base.
- 8. Conduct activities under an approved OCS plan when more than 10 years have elapsed since the plan was approved.
- 9. Change your proposed anchor array pattern if you are using a semisubmersible-type drilling rig and any of your proposed anchor locations are in water depths 400 meters or greater, within 500 feet of the no-activity zone of a topographic feature, or within 100 feet of any pinnacle trend feature with a vertical relief 8 feet or greater.

In the GOMR, supplement your approved EP or DOCD when you propose to conduct activities on the lease(s) or unit 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 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 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 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 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 GOMR recommends that you submit 7 copies (5 Proprietary and 2 Public Information) for all Revised and Amended Plans.

### Timely Submission of EP's and DOCD's

The OCS Lands Act requires the 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 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 GOMR sufficiently in advance to provide the 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 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.

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

Appendix B - General Information	8
Appendix C - Geological, Geophysical, and H <sub>2</sub> S Information	11
Appendix D - Biological Information	14
Appendix E - Wastes and Discharges Information	16
Appendix F - Oil Spill and Chemical Product Information	17
Appendix G - Air Emissions Information	23
Appendix H - Environmental Information	25
Appendix I - CZM Consistency Certification Format	41
Attachment to Appendix I, Special Announcement to OCS Operators	45
Appendix J - OCS Plan Information Form	49

In preparing your EP or DOCD, you may reference information and data discussed in other documents previously submitted or otherwise readily available to the GOMR and other reviewers.

# Paperwork Reduction Act of 1995 Statement

The Paperwork Reduction Act (44 U.S.C. Chapter 35) requires the MMS to inform you that we collect the information referred to in this NTL and its Appendices to evaluate your plans to conduct exploration and development and production activities. We use the information to ensure that planned operations will be conducted safely; will not adversely affect the marine, coastal, or human environment; and will conserve resources of the OCS. Affected States also review the information collected for consistency with approved Coastal Zone Management Programs. We protect all proprietary information submitted according to the Freedom of Information Act and 30 CFR 250.196.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. This NTL and its Appendices primarily refer to the collection of information for requirements under 30 CFR 250, subpart B. The Office of Management and Budget (OMB) approved the collection of information required by these regulations (OMB control number 1010-0049). Responses are mandatory.

Public reporting burden for developing and submitting EP's and DOCD's is estimated to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the plans. Direct comments regarding the burden estimate or any other aspect of this information collection to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

In addition, the NTL refers to information collection requirements in subparts C and D of 30 CFR 250, in 30 CFR 254, and in 30 CFR 256. OMB has approved all of the information collection requirements in these regulations and assigned OMB control numbers 1010-0057, 1010-0053, 1010-0091, and 1010-0006, respectively.

### Contact

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

Chris C. Oynes
Regional Director

# APPENDIX A CONTENTS OF PLAN

#### Your EP should include:

- (A) <u>Description</u>, <u>objectives</u>, <u>and schedule</u>. A description, discussion of the geological objectives, 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) <u>Location</u>. A map showing the surface location(s) and water depth(s) of your proposed wells. 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 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.)
- (C) <u>Drilling unit</u>. A description of the drilling unit and associated equipment you will use to conduct your proposed exploration activities, including a brief description of important safety and pollution prevention features.

#### Your DOCD should include:

- (A) <u>Description</u>, <u>objectives</u>, <u>and schedule</u>. 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) <u>Location</u>. A map showing surface location(s) and water depth(s) of your proposed wells and the surface locations and water depths of your facilities. 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 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.)
- (C) <u>Production facilities</u>. 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 important safety and pollution prevention features.
- (D) <u>Drilling unit</u>. A description of the drilling unit and associated equipment you will use to conduct your proposed development drilling activities, including a brief description of important safety and pollution prevention features.

# APPENDIX B GENERAL INFORMATION

# Your EP should be accompanied by:

- (A) <u>Contact</u>. The name, address, (e-mail address, if available), and telephone number of the person with whom the Regional Supervisor and the affected State(s) can communicate about your EP.
- (B) 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. (For EP's that are subject to CZM consistency requirements, this information is addressed under Appendix H of this NTL and, therefore, you do not need to provide it here.)
- (C) <u>Bonding information</u>. A statement that the activities and facilities proposed in your EP are covered by an appropriate lease or areawide surety bond or alternate security instrument according to 30 CFR 256, subpart I.
- (D) Onshore base and support vessels. A brief description of the onshore base to be used 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 to be used 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. (This information should be included only to the extent that it is not addressed under Appendix H of this NTL.)
- (E) <u>Lease stipulations</u>. A description of the measures you took or will take to satisfy the conditions of lease stipulations related to your proposed exploration activities.

#### Your DOCD should be accompanied by:

- (A) <u>Contact.</u> The name, address, (e-mail address, if available), and telephone number of the person with whom the Regional Supervisor and the affected State(s) can communicate about your DOCD.
  - (B) <u>Project name</u>. If applicable, the name of your development project.
- (C) <u>Production rates and life of reserves</u>. 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. (For DOCD's that are subject to CZM consistency requirements, this information is addressed under Appendix H of this NTL and, therefore, you do not need to provide it here.)

- (E) <u>Bonding information.</u> A statement that the activities and facilities proposed in your DOCD are covered by an appropriate lease or areawide 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 to be used 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 to be used 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. (This information should be included only to the extent that it is not addressed under Appendix H of this NTL.)
- (G) <u>Lease stipulations</u>. 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.
- (H) <u>Socioeconomic information</u>. The information in items (1) and (2) below only when (a) you propose to install a new surface development/production facility or FSO in a deepwater (water depths 400 meters or greater) area, *or* (b) you propose to install a new surface development/production facility or FSO in any water depth that will support a subsea development project in deepwater, *and* (c) the GOMR has not initiated or completed a Grid Environmental Assessment (EA) for the Grid Area that contains the location of your proposed facility or any of the leases on which you propose to conduct activities. Refer to the Internet MMS GOMR website at:

www.gomr.mms.gov/homepg/regulate/environ/ea\_grid/ea\_grid.asp for information regarding the GOMR's Grid EA program and a listing of each of the Grid Areas in the Gulf of Mexico and their current EA status.

- (1) For construction, installation, and operational phases, the location of origin and estimated costs of major components of the facility (deck, risers, tension legs, etc.).
- (2) Using the format below, the numbers and types of workers associated with the proposed development and production activities and the estimated annual workers costs.

Workers	No. Skilled Workers			No. Unskilled	Total Estimated
Location	Professional	Technical	Other	Workers	Annual Worker Costs
Offshore	2	20	15	80	\$3.5 million
Onshore	5	5	0	5	\$0.5 million

(I) <u>Related facilities and operations information</u>. The information in items (1) and (2) below only when (a) you propose to install a new surface development/production facility or FSO in a deepwater (water depths 400 meters or greater) area, *or* (b) you propose to install a surface development/production facility or FSO in any water depth that will support a subsea development project in deepwater, *and* (c) the GOMR has not initiated or completed a Grid Environmental Assessment (EA) for the Grid Area that contains the location of your proposed facility or any of the leases on which you propose to conduct activities. Refer to the Internet MMS GOMR website at:

www.gomr.mms.gov/homepg/regulate/environ/ea\_grid/ea\_grid.asp for information regarding the GOMR's Grid EA program and a listing of each of the Grid Areas in the Gulf of Mexico and their current EA status.

- (1) A description and location of any proposed or existing drilling units, development/production platforms, right-of-way pipelines (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, and proposed routes of the right-of-way pipeline(s), the volume of oil/gas transported, and the shut-in time.
- (2) 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 H<sub>2</sub>S INFORMATION

# **Geological and Geophysical Information**

#### Your EP should be accompanied by:

- (A) <u>Structure contour maps</u>. 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 activities cover more than one lease block and if you obtain prior approval from the Regional Supervisor.
- (B) <u>Interpreted two-dimensional (2-D) and/or three-dimensional (3-D) seismic lines</u>. 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 are not required to provide this information if the GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.
- (C) <u>Geological structure cross-sections</u>. Interpreted geological structure cross-sections corresponding to each seismic line submitted in paragraph (B) of this section 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.
- (D) <u>Shallow hazards report</u>. Shallow hazards report prepared using the guidance in NTL 98-20 and based on information obtained from a geophysical survey or reference to such report if you have already submitted it to the Regional Supervisor.
- (E) <u>Shallow hazards assessment</u>. For each proposed well, 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 98-20.
- (F) <u>High-resolution seismic lines</u>. Annotated (shot points, time lines, well surface locations) copies of the two high-resolution survey lines (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 the proposed well locations. Provide this information as an enclosure to one proprietary copy of your EP. You are not required to provide this information if the GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.

For deepwater areas, the high-resolution survey lines may be replaced 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) overlaid 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 are not required to provide sidescan sonar or magnetometer lines if you obtain the prior approval of the Regional Supervisor on a case-by-case basis.
- (G) <u>Stratigraphic column</u>. A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of each prospect. Label objective horizons on the column.
- (H) <u>Time vs. depth tables</u>. 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) <u>Structure contour maps</u>. 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 activities cover more than one lease block and if you obtain prior approval from the Regional Supervisor.
- (B) <u>Interpreted two-dimensional (2-D) and/or three-dimensional (3-D) seismic lines</u>. 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 are not required to provide this information if the GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's.
- (C) <u>Geological structure cross-sections</u>. Interpreted geological structure cross-sections corresponding to each seismic line submitted in paragraph (B) of this section 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.
- (D) <u>Shallow hazards report</u>. Shallow hazards report prepared using the guidance in NTL 98-20 and based on information obtained from a geophysical survey or reference to such report if you have already submitted it to the Regional Supervisor.
- (E) <u>Shallow hazards assessment</u>. For each proposed well, 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 98-20.
- (F) <u>High-resolution seismic lines</u>. Annotated (shot points, time lines, well surface locations) copies of the two high-resolution survey lines (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 the proposed well locations. Provide this information as an enclosure to one proprietary copy of your DOCD. You are not required to provide this information if the GOMR has approved the surface locations of your proposed wells in previously submitted EP's and DOCD's. For deepwater areas, the high-resolution survey lines

may be replaced 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) overlaid 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 are not required 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 (H<sub>2</sub>S) Information

### Your EP should be accompanied by:

- (A) <u>Classification</u>. According to 30 CFR 250.417(c), a request that the Regional Supervisor classify the area of your proposed exploration activities as either H<sub>2</sub>S absent, H<sub>2</sub>S present, or H<sub>2</sub>S unknown. Provide sufficient information (including reference to correlative stratigraphic sections) to justify your request.
- (B)  $\underline{\text{H}_2\text{S}}$  Contingency Plan. If you request that the Regional Supervisor classify the area of your proposed exploration activities as either  $\text{H}_2\text{S}$  present or  $\text{H}_2\text{S}$  unknown, a reference to an approved or submitted  $\text{H}_2\text{S}$  Contingency Plan prepared according to 30 CFR 250.417(f) that covers the proposed exploration activities.

# Your DOCD should be accompanied by:

- (A) <u>Classification</u>. According to 30 CFR 250.417(c), a request that the Regional Supervisor classify the area of your proposed development and production activities as either H<sub>2</sub>S absent, H<sub>2</sub>S present, or H<sub>2</sub>S unknown. Provide sufficient information (including reference to correlative stratigraphic sections) to justify your request.
- (B)  $\underline{\text{H}_2\text{S}}$  Contingency Plan. If you request that the Regional Supervisor classify the area of your proposed development and production activities as either  $\text{H}_2\text{S}$  present or  $\text{H}_2\text{S}$  unknown, a reference to an approved or submitted  $\text{H}_2\text{S}$  Contingency Plan prepared according to 30 CFR 250.417(f) that covers the proposed development and production activities.

# APPENDIX D BIOLOGICAL INFORMATION

# **Chemosynthetic Information**

# Your EP or DOCD should be accompanied by the following:

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

# **Topographic Features Information**

### Your EP or DOCD should be accompanied by the following:

- (A) 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) 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."

Be further advised that the MMS and the National Marine Fisheries Service (NMFS) 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 to consult with NMFS. 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 the following:

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 Nos. 4 and 5 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 Marine Fisheries Service (NMFS) 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 NMFS. This could extend the time necessary to complete the review of your EP or DOCD.

# APPENDIX E WASTES AND DISCHARGES INFORMATION

# Your EP should be accompanied by:

A discussion of the quantity, rates of discharge, and composition of solid and liquid wastes and discharges likely to be generated by onshore and offshore activities and transportation operations (including, but not limited to, drilling muds and cuttings, sewage, and chemicals); the basis for determining the composition, quantities, and rates of discharge of such discharges; and plans for treating, storing, transporting, and disposing of such wastes and discharges. (For EP's in the Eastern GOM, this information is addressed under Appendix H and, therefore, you do not need to provide it here.) (If the above information is in your written notification to the EPA of intent to be covered under the general NPDES permit, you may submit that document.)

# Your DOCD should be accompanied by:

A discussion of the quantity, rates of discharge, and composition of solid and liquid wastes and discharges likely to be generated by onshore and offshore activities and transportation operations (including, but not limited to, drilling muds and cuttings, produced water, sewage, and chemicals); the basis for determining the composition, quantities, and rates of such discharges; and plans for treating, storing, transporting, and disposing of such wastes and discharges. (If the above information is in your written notification to the EPA of intent to be covered under the general NPDES permit, you may submit that document.)

# APPENDIX F OIL SPILL AND CHEMICAL PRODUCT 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 prepared according to 30 CFR 254. In the GOMR, it is usually expedient for you to submit for approval a regional OSRP that covers all of your OCS leases and facilities in the Western and Central Planning Areas. You may then reference your approved regional OSRP in your EP's and DOCD's. If you choose to provide a site-specific OSRP instead of referencing a Regional OSRP, prepare it according to 30 CFR 254.21. through 254.29. In the Eastern Planning Area, provide a site-specific OSRP.

Refer to the Quick Reference Table below for an identification of the type of oil and chemical information that should accompany your EP or DOCD. Following the table is a detailed explanation of the 16 numbered oil and chemical information items for EP's and DOCD's.

**Quick Reference Table for Oil and Chemical Information** 

Quick Kei	erence ra	ibie for Oli and	Chemical III	ioi mation	
	Plans in	Plans in Flower	Plans with	Plans for new	All other plans
Information	Eastern	Gardens &	storage for	deepwater or	in Western and
Items	Planning	Stetson Banks	hydrocarbons	deepwater-related	Central Planning
	Area	Areas <sup>1</sup>	$> 50,000 \text{ bbl}^2$	surface facilities <sup>3</sup>	Areas
Informati	on to Comp	ly with the Oil Pol	lution Act of 19	90 (OPA)□	
1. Site-specific OSRP	<b>→</b> □				
2. Regional OSRP information		<b>→</b> □	<b>&gt;</b>	>	<b>✓</b>
3. OSRO information		<b>→</b> □	<b>&gt;</b> [	>	<b>~</b>
4. Worst-case scenario comparison		<b>→</b> □	<b>&gt;</b>	>	<b>✓</b>
Information for MM	S to Comply	y with the Nationa	l Environmenta	l Policy Act (NEPA)	
5. Facility tanks, production vessels	✓ []	<b>→</b> □	<b>→</b> □	>	
6. Diesel oil supply vessels	<b>→</b> □	<b>✓</b> []	<b>→</b> □	<b>→</b> □	
7. Support vessels fuel tanks	✓ 🗆	<b>✓</b> □	<b>→</b> □	<b>→</b> □	
8. Produced oils transportation vessels	<b>→</b> □	<b>→</b> □	<b>~</b>	<b>→</b> □	
9. Oil- and synthetic-based muds	<b>→</b> □	<b>→</b> □	<b>→</b> □	<b>✓</b> []	
10. Blowout scenario	✓ []	<b>→</b> □	<b>→</b> □	<b>→</b> □	
11. Chemical products	>	<b>→</b> □	<b>→</b> □	<b>→</b>	
12. Oils characteristics	>	<b>→</b> □	<b>&gt;</b> [	>	
13. Spill response sites		<b>→</b> □	<b>~</b>	<b>→</b> □	
14. Spill response discussion		<b>→</b> □	<b>→</b> □	>	
15. Pollution prevention measures	<b>&gt;</b> [	<b>→</b> □	<b>&gt;</b> [	>	
16. FGBNMS monitoring plans		<b>→</b> □			

 $<sup>\</sup>checkmark$  = Information is required.

#### Footnotes:

- 1. **Plans in Flower Gardens & Stetson Banks Areas**: The OCS blocks affected by this are as indicated in the Topographic Features Lease Stipulation and 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.
- 2. **Plans with storage of liquid hydrocarbons > 50,000 bbl**: If your proposed activities, including offshore host facilities that will support your proposed activity, include storage of greater than 50,000 bbl of liquid hydrocarbons.
- 3. Plans for new deepwater or deepwater-related surface facilities: For DOCD's, if you propose to install a surface facility located in water depths > 400 meters, or you propose to install a surface facility in any water depth to support subsea development in water depths > 400 meters.

# <u>Information to Comply with the Oil Pollution Act of 1990 (OPA)</u>

- 1. **Site-specific OSRP.** Provide a site-specific OSRP prepared according to the requirements of 30 CFR 254.21 through 254.29 that specifically addresses the activities proposed. If you provide information items 2 through 16 in the site-specific OSRP in a manner that also meets the regulatory requirements discussed in this NTL, you do not need to resubmit them separately. For proposed operations affected by the oil spill stipulation in the Eastern Planning Area, the site-specific OSRP should include a detailed description of the equipment that you will procure to satisfy the requirements of the stipulation and the timing that the equipment will be placed onsite and/or be available.
- 2. **Regional OSRP information.** Provide the following information regarding your approved regional OSRP: the company or companies covered, the OSRP approval date or your worst-case certification approval date if your OSRP is pending approval, and a statement that the activities proposed in your EP or DOCD will be covered by your regional OSRP.
- 3. **OSRO information.** Provide the name(s) of your oil spill removal organization(s) for both equipment and personnel.
- 4. **Worst-case scenario comparison.** If you have an approved regional OSRP, provide a comparison of the appropriate worst-case scenario from your approved regional 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 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 ordinarily determine that the worst-case scenario from your proposed activities supersedes your worst-case scenario from your approved regional OSRP as long as your contracted OSRO capabilities are sufficient to respond to the worst-case volume in your EP.

[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 OSRP.]

Category	Regional OSRP	EP or DOCD
	Production –	Development –
Type of Activity <sup>1</sup>	Subsea completion	Platform drilling rig
Facility Location (area/block)	EI 250	MC 900
Facility Designation <sup>2</sup>	Well No. 2	Rio Loco Project
Distance to Nearest Shoreline (miles)	45 miles	160 miles
Volume <sup>3</sup>		
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) <sup>4</sup>	37°	37°

#### Footnotes:

- 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. Your regional OSRP worst-case scenario volume must be taken from the appropriate section of your regional OSRP. For EP's, the worst-case scenario volume must be determined by using the daily worst-case discharge volume determined using the guidance at 30 CFR 254.47(b). For DOCD's, the daily worst-case discharge volume must be determined by using the guidance at 30 CFR 254.47 (a) and/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 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 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 OSRP, modify your approved regional OSRP to incorporate this new worst-case scenario and provide the following statement:

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

The EP or DOCD will not be approved until the GOMR has received and approved your regional 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 OSRP, provide the following statement:

Since (name of company) has the capability to respond to the worst-case spill scenario included in its regional 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 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).

### <u>Information for MMS to Comply with the National Environmental Policy Act (NEPA)</u>

5. **Facility tanks, production vessels.** Provide 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°

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

7. **Support vessels fuel tanks.** Provide 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
Supply vessels	2	500
Service vessels	1	500
Crew vessels	1	500

<sup>\*</sup> Includes anchor-handling vessels, construction barges, lay barges, etc.

- 8. **Produced liquid hydrocarbons transportation vessels.** If liquid hydrocarbons (including well test fluids) will be transported by means other than a pipeline, provide 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.
- 9. **Oil- and synthetic-based drilling fluids**. Show 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

- 10. **Blowout scenario.** Provide 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. Also, include 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.
- 11. **Chemical products.** Provide a list of chemical products that will be handled on, stored on, or transported to or from the production or host facility in quantities greater than Reportable Quantities as designated in 40 CFR 302.4. For each product you list, provide
  - (a) The type and size of the container that will be used for storage at the facility.
  - (b) The amount in pounds per month (or other site-specific appropriate time

- interval) to be transported, used, and disposed.
- (c) A Material Safety Data Sheet (MSDS) or Internet address for an MSDS.
- (d) A description of how the chemical product will be transported, loaded, used at the facility (batch or continuous injection), and offloaded and disposed.
- 12. **Oils characteristics**. Provide 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 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).

For EP's, you may provide information on a reservoir oil that is expected to be similar in characteristics. For DOCD's, 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
· Area/Block	· Area/Block	· Pipeline segment number
· MMS platform ID	· MMS platform ID	· For each pipeline that feeds into
· API Well No.	· Field/Unit	the system, the ID codes for the
· Completion perforation interval	· Sample date	closest upstream LACT units
· MMS's reservoir name	· Sample No. (if more than one is	and/or facility measurement
· Sample date	taken)	points
· Sample No.(if more than one is	· Listing of API Well Nos.	· Storage tank ID No. (if sampled
taken)	· Storage tank ID No. (if sampled	at a storage tank)
	at a storage tank)	

13. **Spill response sites.** Provide 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

- 14. **Spill response discussion for NEPA analysis.** Discuss 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:
  - (a) the blow-out scenario from Item No. 10 above, or
  - (b) the volume of the largest oil/fuel storage tank on the drilling rig or facility.
- 15. **Pollution prevention measures.** Discuss the safety, pollution prevention, and early spill detection measures that you will take beyond those required by 30 CFR 250.
- 16. **FGBNMS Monitoring Plans.** Discuss 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

Since May 5, 1994, you have provided most of the air emissions information for EP's and DOCD's using standardized spreadsheets. These spreadsheets have been revised to include updated emissions factors and to incorporate new features that will make them easier to use. A new feature to the spreadsheets is the use of separate spreadsheets for EP's and DOCD's. Separate spreadsheets for these different activities reduce the complexity of the EP spreadsheet and should reduce the error rate. Another new feature is the addition of an air quality screening list to the EP and DOCD spreadsheets. These revised air emissions spreadsheets are available on the Internet at: <a href="www.gomr.mms.gov/homepg/mmsforms/aqep.xlw">www.gomr.mms.gov/homepg/mmsforms/aqep.xlw</a> for EP's and www.gomr.mms.gov/homepg/mmsforms/aqdocd.xlw for DOCD's.

If you answer **no** to all of the questions on the air quality screening list, include a printout of the completed air quality screening list in your EP or DOCD, and this will complete the air emissions information portion of your EP or DOCD.

If you answer *yes* to any of the questions on the air quality screening list, include a full set of completed spreadsheets in your EP or DOCD to provide the following information:

- (A) Projected emissions. Tables showing the projected emissions of sulfur dioxide (SO<sub>2</sub>), particulate matter (in the form of PM<sub>10</sub>, and once emission factors are available, also PM<sub>2.5</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) that will be generated by your proposed activities. For each source on or associated with the facility, list the projected peak hourly emissions, the total annual emissions in tons per year, emissions over the duration of the proposed activities, and the frequency and duration of emissions. Provide the basis for all calculations including engine size and rating and applicable operational information. Base the projected emissions on the maximum rated capacity of the equipment, on and associated with the facility, under its physical and operational design. You may use actual fuel usage information (e.g., run times, fuel consumption, low sulphur fuel) where it is known. If you do, provide the description or documentation as discussed in sections (E) and (F) below. If the specific drilling unit has not yet been determined, use the maximum emission estimates for the type of drilling unit (jack-up, platform rig, barge, submersible, semisubmersible, or drillship) you will use. Maximum emission estimates per drilling rig/drillship class are provided at the above website.
- (B) <u>Exemption level calculations</u>. For purposes of calculating the MMS exemption level, express the distance to shore in tenths of a statute mile for distances up to 20 miles and in whole statute miles for distances beyond 20 miles. Use the nearest point of any land. The GOMR defines this term as the distance from the facility to the mean high water mark of any State, including barrier islands and shoals.
- (C) <u>Facility total</u>. If the activities proposed in your EP or DOCD will use an existing facility, provide the total emissions for the facility, i.e., emissions from both existing sources and the proposed new activities.

(D) <u>Processes</u>, <u>equipment</u>, <u>fuels</u>, <u>and combustibles</u>. A description of the processes, processing equipment, combustion equipment, fuels, and storage units associated with your proposed activities. Include characteristics and the frequency, duration, and maximum burn rate of any well test fluids you will burn.

# Your EP or DOCD should also include the following information, if applicable:

- (E) <u>Emission reduction measures</u>. A description of any proposed emission reduction measures, including a description of the affected source(s), the emission reduction control technologies or procedures, the quantity of reductions to be achieved, and the monitoring system you propose to use to measure emissions.
- (F) <u>Verification of nondefault emission factors</u>. Documentation of any emission factor below the default values included in the air emissions calculations and reporting spreadsheets. Verify these reduced emission factors upon startup and occasionally thereafter to ensure that the reduced emission factors are actually being achieved and maintained.
- (G) Nonexempt facilities. A description of how you will comply with 30 CFR 250.303(e) through (i) when the projected emissions of  $SO_2$ , PM,  $NO_x$ , CO, or VOC are greater than the respective emission exemption amounts "E" calculated using the formulas in 30 CFR 250.303(d).
- (H) <u>Modeling report</u>. If you are required by 30 CFR 250.303 to use an approved air quality model to model projected air emissions and prepare a report, a copy of the report prepared or reference to such report if it has been submitted to the GOMR.

# APPENDIX H ENVIRONMENTAL INFORMATION

# **OUTLINE**

- I. General Information, Objectives and Authority
  - A. General Information
  - B. Objectives
  - C. Authority
- II. Environmental Report/Special Environmental Information Guidelines for Coastal Zone Management Consistency Determinations for OCS Plans Submitted in Area I of the Gulf of Mexico
  - A. Introduction
  - B. Outline
  - C. Special Environmental Information for OCS Plans Proposing Activities Within the Protective Zones of the Flower Garden Banks
- III. Environmental Report Guidelines for OCS Plans Submitted in Area II of the Gulf of Mexico
  - A. Introduction
  - B. Outline
- IV. Federal Consistency Review Procedures and Requirements

### I. General Information, Objectives, and Authority

#### A. General Information

This appendix provides guidance on preparing and submitting Environmental Reports (ER's), Special Environmental Information, and Certificates of Coastal Zone Consistency as required by 30 CFR 250.203(b) and 204(b).

Section II.A covers ER's to support OCS plans proposed in Area I of the GOM, depicted on Figure A at <a href="https://www.mms.gov/homepg/offshore/plans">www.mms.gov/homepg/offshore/plans</a> permits/czmmaps.html on the Internet.

Section II.B covers Special Environmental Information to support OCS plans that propose activities within the protective zones of the Flower Garden Banks.

Section III covers ER's to support OCS plans proposed in Area II of the GOM, depicted on Figure A at <a href="https://www.mms.gov/homepg/offshore/plans">www.mms.gov/homepg/offshore/plans</a> permits/czmmaps.html on the Internet.

To meet the Coastal Zone Management Plan requirements for the affected States having approved Coastal Zone Management Programs, refer to Appendix I to prepare and submit Certificates of Coastal Zone Consistency, when required. Figures B through D at <a href="https://www.mms.gov/homepg/offshore/plans\_permits/czmmaps.html">www.mms.gov/homepg/offshore/plans\_permits/czmmaps.html</a> on the Internet delineate those areas of the GOM determined by the Director to affect the GOM coastal States.

The term "areas determined to affect the States" used in this Appendix applies only to this appendix and does not necessarily describe the directly affected States under Section 8(g) of the OCS Lands Act (43 U.S.C. 1331, *et seq.*), the Coastal Energy Impact Program under Subpart H of 15 CFR 930, or any boundary disputes between States.

The GOMR encourages you to use tiering and referencing to reduce information reporting requirements when you prepare an Environmental Report. To eliminate the repetition of information and data discussed in other related documents, you can summarize the information, data, and issues in these documents and concentrate on the issues specific to the site of the proposed activity. Referenced documents can include the related plan, a broader presale environmental impact statement, other environmental reports, environmental analyses, or impact statements prepared for the geographic area. You can reference these documents when the incorporation will cause a reduction in the Environmental Report's bulk without impeding the review of the issues. Your Environmental Report should cite and describe briefly the referenced material and include a statement that indicates where the material is available for inspection. You may reference only material that is reasonably available for inspection by GOMR personnel.

Submit the same number of copies of Environmental Reports, Special Environmental Information, and/or Certificates of Coastal Zone Consistency as you submit for your OCS plan.

The GOMR will deem incomplete any EP or DOCD that fails to include a required Environmental Report and Consistency Certification. The GOMR will also deem incomplete any EP or DOCD that fails to include the specified Special Environmental Information.

# **B.** Objectives

- 1. To provide guidelines for meeting the requirements of 30 CFR 250.203(b) and 30 CFR 250.204(b).
- 2. To establish a uniform method of portraying data and planned activities that can be efficiently utilized by the GOMR to prepare National Environmental Policy Act (NEPA) documents and to determine the potential environmental impacts of proposed oil and gas operations on the OCS.
- 3. To provide information to affected State(s) and the public concerning the nearshore and onshore impacts of the activities described in proposed OCS plans.
- 4. To provide the necessary data and information to the affected State(s) to enable them to make Coastal Zone Management consistency determinations.

# C. Authority

- 1. Outer Continental Shelf Lands Act (43 U.S.C. 1331 *et seq.*), Outer Continental Shelf Lands Act Amendments (43 U.S.C. 1801, *et seq.*), and implementing regulations (30 CFR 250.203 and 30 CFR 250.204).
- 2. Coastal Zone Management Act (16 U.S.C. 1451, et seq.) and implementing regulations (15 CFR 930).
  - 3. National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seg.).

# II. Environmental Report/Special Environmental Information Guidelines for Coastal Zone Management (CZM) Consistency Determinations for OCS Plans Submitted in Area I of the Gulf of Mexico

#### A. Introduction

- **1. Environmental Report**. Submit an Environmental Report to support an Exploration Plan (EP), a Development Operations Coordination Document (DOCD), or any change to these approved plans that requires issuance of additional permits, except those granted general concurrence by an affected State, in which:
- a. Activities are proposed in that portion of Area I of the Gulf of Mexico OCS determined by the Director to affect a State with an approved Coastal Zone Management Program (CZMP); and/or
- b. Activities are proposed on the OCS that originate or terminate within or traverse the boundary of the coastal zone of a State bordering Area I that has an approved CZMP.

Of the States bordering Area I, Texas, Louisiana, Mississippi, and Alabama have approved CZMPs and need Environmental Reports for CZM consistency determination purposes, as shown in the maps at <a href="https://www.mms.gov/homepg/offshore/plans\_permits/czmmaps.html">www.mms.gov/homepg/offshore/plans\_permits/czmmaps.html</a>.

The States of Texas (conditionally), Louisiana, and Mississippi have granted general CZM concurrence to most of the activities described in Supplemental EP's and Supplemental DOCD's that affect them. Therefore, the GOMR does not require Environmental Reports to support these plans. The exception to this is Supplemental DOCD's that propose the installation of one or more additional multi-well platforms that have not been included in a previously approved plan. The GOMR does require Environmental Reports to support these Supplemental DOCD's. Revised EP's and DOCD's do not require the issuance of additional permits and are not subject to an automatic CZM consistency review; therefore, the GOMR does not require an Environmental Report for Revised Plans in Area I.

- **2. Special Environmental Information**. Submit specific Special Environmental Information to support an EP, DOCD, or any change to these approved plans that proposes activities in Area I where you propose to
- a. Locate exploration, development, and/or production facilities in areas of high seismic risk or seismicity or in areas of relatively untested deepwater or remoteness;
- b. Locate exploration, development, and/or production facilities within the boundary of a proposed or established marine sanctuary and/or within or near the boundary of a proposed or established wildlife refuge, or within areas of high ecological sensitivity;
- c. Locate bottom-founded structures in areas of potentially hazardous natural bottom conditions; or
  - d. Use any new or unusual technology.

The GOMR may require this Special Environmental Information in addition to an Environmental Report and the Consistency information described in Sections II.A. and III of this Appendix, and the certification in Appendix I. Pertinent environmental information is becoming increasingly available in Area I. We have, therefore, determined the preparation of extensive Environmental Reports to be unnecessary for any of the four categories listed above. We will determine Special Environmental Information requirements on a case-by-case basis for OCS plans that fall under any of the four categories, with the exception of plans that propose activities within the protective zones of the Flower Garden Banks. We have determined that certain Special Environmental Information is necessary to support EP's and DOCD's that propose activities within the restriction zones of the East and West Flower Garden Banks and Stetson Bank. Section II.C. covers this Special Environmental Information. Special Environmental Information submitted for a Revised OCS Plan need only address those issues specific to the revised action.

#### **B.** Outline

The following outline provides a detailed listing of the types of information for each section of the Environmental Report. The outline includes the combined requirements of Environmental Reports for EP's or DOCD's. As a result, some of the listed items may not apply to a particular proposal, and you should discuss only those items that are relevant. Provide a statement when data are not available or the data requirements are not applicable to a proposed action.

#### 1. TITLE PAGE

- a. Project name.
- b. Area name (general OCS area).
- c. Block number and field.
- d. Lessee and/or operator.
- e. Platform/Unit name (if applicable).
- f. Date of preparation of Environmental Report.
- g. Name, address, and telephone number of a contact person.

#### 2. DESCRIPTION OF THE PROPOSED ACTION

Briefly summarize the nature and scope of the proposed activities described in the EP or DOCD. Include the following information (where appropriate):

- a. Description of proposed travel modes and routes and frequency for moving supplies and personnel to and from the offshore activity site and the onshore bases. Examples Number of trips/day and anticipated routes for crewboats, helicopters, supply boats, etc.
- b. Identification of support bases and number and types of new workers associated with the proposed activity. Reference should also be made to the most current update of the socioeconomic database report, if available.
- c. Identification of the number, location, and size of any support facilities that will need to be provided for the proposed activity. Examples New bases, refineries, storage facilities, pumping stations, helicopter pads, boat docks, fueling facilities, etc.

- d. Description of any new techniques or unusual technology that may affect coastal waters.
- e. Maps showing location of the proposed activity in relation to each of the affected States' coastal zones.
- f. For DOCD's, the means proposed to transport oil and gas to shore from the lease site, the routes to be followed, and the estimated quantities of oil and gas to be moved along such routes. Include also onshore route information and probable onshore location of terminals. Examples Pipeline routes (those going onshore or to coastal waters, not those of lease gathering lines), barge or tanker routes, etc.

#### 3. DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

Discuss how the proposed activity will affect areas adjacent to the activity site and the affected States' coastal zones, including coastal waters and onshore areas. Give primary consideration to the impacts of the proposed activity on environmentally sensitive areas. Address the following parameters:

- a. Physical and Environmental
  - (1) Commercial fishing
  - (2) Shipping (transit lanes, anchorage areas, fairways, etc.)
  - (3) Small-craft pleasure boating, sport fishing, and recreation
  - (4) Archaeological resources Known prehistoric and historic areas
- (5) Ecologically sensitive features Wildlife refuges and preserves, marine and estuarine sanctuaries, areas of particular concern identified by each affected State, breeding and spawning grounds, migration routes, wetlands, and oyster reefs
  - (6) Existing pipelines and cables
  - (7) Other mineral uses
  - (8) Ocean dumping activities
  - (9) Endangered or threatened species

Discuss the direct and indirect impacts associated with the activity site itself, as well as the impacts associated with ancillary activities such as pipelines and support facilities. Where a discussion of these impacts has been included in the environmental impact statement prepared for the lease sale, you may reference this discussion by title, volume, and page number of the appropriate environmental impact statement. Take care to ensure that these cited discussions cover the full extent of the impact of this particular activity. For example, the commercial fishing impact discussion may be adequate for offshore shrimping but may not address the impacts of a newly proposed pipeline on oyster fishing near shore. Note: Clearly state if the above mentioned items are not impacted.

#### b. Socioeconomic

Rather than require that socioeconomic data beyond identifying new employees described in Item 2.b. above be included in each plan, the States of Louisiana, Mississippi, and Alabama will allow each OCS operator to submit a socioeconomic database report covering all OCS activities every six months. Submit the first such report after the MMS and the States finalize the report

requirements.

#### 4. UNAVOIDABLE ADVERSE IMPACTS

This section contains a summary of those impacts resulting from the proposed action that are unavoidable. Briefly state why these impacts are justified. The individual States will weigh these impacts against the need for the project and may, in some cases, suggest technically feasible and reasonable alternatives that could have a lesser impact. Note: State if there are no impacts.

#### 5. References

Reference applicable Federal laws and regulations, Notices to Lessees and Operators, Federal and State environmental documents, and any other information source used to prepare the Environmental Report.

#### 6. STATEMENT

# Provide the following statement:

"The proposed activity will be carried out and completed with the guarantee that: The best available and safest technologies will be used throughout the project. These include meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems. All operations will be covered by an approved oil spill response plan. All applicable Federal, State, and local requirements regarding air emissions and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with."

# C. Special Environmental Information for OCS Plans Proposing Activities Within the Protective Zones of the Flower Garden Banks

- 1. A brief description of the major safety and monitoring systems you will use on the rig/platform.
- 2. A discussion of all operational lease stipulations including the steps you have taken or will take to satisfy the conditions of such requirements.
- 3. A discussion of your approved oil spill response plan including identification of the primary base and staging area and calculation of travel and deployment times.
- 4. A brief description of proposed travel modes, routes, and frequency for both personnel and supplies.
- 5. A description of any new construction or expansion of onshore facilities, including dredging and filling activities.
  - 6. Identification of any additional onshore and/or offshore personnel you will employ.

- 7. A discussion of any new or unusual technology you will use.
- 8. A discussion of the solid and liquid wastes the proposed activities will likely generate:
  - (a) Solid wastes including:
- (1) The total quantity discharged, the rates of discharge, the method of discharge or disposal, and the basis for determining each of the above values for all drill cuttings.
- (2) The estimated quantity, composition, and methods of disposal of other solid wastes.
  - (b) Liquid wastes including:
- (1) The composition (with emphasis on diesel or mineral oil), the total quantity discharged (in dry weight if possible), the average and maximum daily discharge rates, including a discussion of the variance of the daily rates, the method of discharge or disposal, and the basis for determining each of the above values for all drilling fluids. Discuss any special requirements imposed by your NPDES permit.
- (2) The composition, quantity, rates of discharge, methods of treatment and disposal, and the basis for determining each of the above values for all domestic and sanitary wastes.
- (3) A brief description of the types of other liquid wastes (such as ballast water, freshwater maker blowdown, and blowout preventer fluid) to be discharged.
- 9. For DOCD's, a brief description of the mode and tentative route for the transportation of hydrocarbons to shore.

If you have adequately addressed any of the above topics in the OCS plan, a reference to the appropriate section of the plan will be sufficient.

# III. Environmental Report Guidelines for OCS Plans Submitted in Area II of the Gulf of Mexico

#### A. Introduction

Submit an Environmental Report to support an EP, DOCD, or any change to these approved plans that proposes activities on the OCS in Area II of the Gulf of Mexico and/or proposes activities on the OCS that originate or terminate within or traverse the boundary of the coastal zone of the State of Florida. Submit an Environmental Report that addresses only those issues specific to the proposed action with Revised Plans submitted for activities in Area II.

These guidelines provide a basic format for preparing an Environmental Report in support of a plan submitted for Area II of the GOM OCS. Include information available at the time you submit the related plan to the extent that such information is accurate, current, and applicable to the geographic area of the activities proposed in the plan. Refer to information and data contained in the related plan, survey reports, previous environmental reports, and other environmental assessments and environmental impact statements prepared for the geographic area by identifying the information and indicating the source for obtaining copies of cited materials.

#### B. Outline

The following outline provides a detailed listing of the types of information for each section of the Environmental Report. The outline includes the combined requirements of Environmental Reports for EP's or DOCD's. As a result, some of the listed items may not apply to a particular proposal, and you should discuss only those items that are relevant. Provide a statement when data are not available or when the data requirements are not applicable to a proposed action.

#### 1. TITLE PAGE

- a. Project name.
- b. Area name (general OCS area).
- c. Block number and field.
- d. Lessee and/or operator.
- e. Platform/unit name (if applicable).
- f. Date of preparation of Environmental Report.
- g. Name, address, and telephone number of a contact person.
- h. Previous related environmental report(s), environmental assessment(s), and/or environmental impact statement(s).

### 2. DESCRIPTION OF PROPOSED ACTION

Briefly summarize the nature and scope of the proposed activities described in the EP or DOCD. If the plan clearly and adequately addresses all of the information in this section, a reference to the plan is all that is needed here. For plans that do not address all of the information in this section, use a combination of references to the plan and supplemental information and discussion supplied here to describe the proposed activities. Include the following (where appropriate):

- a. General.
  - (1) Lessee and/or operator.
  - (2) Lease number and location.
  - (3) Objectives of the proposed activities.
  - (4) Description and location of existing and/or proposed platforms or vessels.
- (5) The means proposed to transport oil and gas to shore, the routes to be followed, and the estimated quantities of oil and gas to be moved along such routes. Include probable onshore location of terminals for DOCD's.
  - b. A brief description of equipment and support systems to include
    - (1) Equipment to be used and general layout.
    - (2) Safety systems.
    - (3) Monitoring systems.
- (4) Onshore support systems, including any requirements for new or modified onshore facilities and the location of onshore facilities you will use.
- c. Schedule. Approximate time frames for conducting individual activities, to the maximum extent practicable. Include possible recompletions, workovers, and abandonment activities for which permits may be required. Provide
  - (1) Expected sequence of events.
  - (2) Estimated time required to complete specific activities.
  - (3) Month and year you expect specific activities to occur onshore and offshore.
  - (4) Month and year other associated activities are likely to occur.
- d. Transportation Routes. Description of proposed travel modes and routes and frequency for moving supplies and personnel to and from the offshore activity site.
- e. Personnel Requirements. Personnel required to conduct activities (total numbers and types) both offshore and onshore.
- f. Technology. Detailed, comprehensive discussion of any new or unusual technology that you propose to use in the implementation of the proposed plan or that you may use in onshore support facilities owned and/or operated by others.
- g. Response Plans. Discuss the use of your response plans described in the plan, including contingency plans for preventing, reporting, and cleaning up spills of oil (including diesel fuel) or waste materials. Include
  - (1) Description of pollution prevention procedures.
  - (2) Personnel involved in implementation of contingency plans.
- (3) Description of cleanup activities, response time, capacity, and location of equipment.
- h. Discharges and Emissions. Discussion of the quantity, rates of discharge, and chemical composition of solid, liquid, and gaseous wastes and pollutants likely to be generated by onshore and offshore activities and transport operations (including, but not limited to, drilling muds and cuttings, sewage, and chemicals), the basis for determining the composition, quantities, and rates of discharge of pollutants and plans for treating, storing, transporting, and disposing of such wastes and pollutants. Include a discussion of airborne pollutants generated, including:

- (1) Sources (e.g., rig power units, incineration equipment, supply and transport vessels).
  - (2) Composition (e.g., hydrocarbons, particulates, CO,  $NO_x$ ,  $SO_x$ ).
  - (3) Emission rates and total quantities of pollutants generated.
- i. State Certification. Certificate of Coastal Zone Consistency for each affected State having an approved Coastal Zone Management Program, as provided in 15 CFR 930.
  - j. Measures for Compliance. Provide
    - (1) A description of measures you propose to comply with pertinent regulations.
- (2) A discussion of any existing or planned environmental protection measures you have not previously described in this section.
- k. Nearby Pending Actions. Nearby pending actions (leasing actions, actual or planned operations for the development of overlying or underlying minerals other than oil and gas, or other present uses or proposals under consideration as far as the applicant is aware).
- l. Monitoring Systems. Discussion and delineation of existing or planned monitoring systems that could be or will be used to measure changes in environmental conditions and provide information and data on the impacts and activities in the geographic area of the proposed activities. Include monitoring systems maintained on nearby platforms by industry, State and Federal Government Agencies, and colleges and universities.
- m. Maps. Suitable maps and diagrams showing details of the proposed project layout.

#### 3. ALTERNATIVES TO THE PROPOSED ACTION

Discuss relevant alternatives to the proposed activities or major segments of the proposed activities that would result in less risk of adverse environmental impacts. The alternatives considered should be technically feasible and reasonable. At a minimum, include a discussion of practicable alternatives for mitigating against the impacts described in "Environmental Consequences." Note: State if you believe that practical alternatives for accomplishing the stated objectives or reducing environmental impacts do not exist. You need not discuss alternatives in Environmental Reports for EP's.

#### 4. DESCRIPTION OF THE AFFECTED ENVIRONMENT

Describe the existing environment at or near the site of the proposed activities. Emphasize those environmental values that may affect or be affected by these activities. Use the parameters outlined below as a basic checklist for preparing this part of the Environmental Report. Address any parameter that may affect or may be affected by the proposed activities. The extent to which consideration of any listed parameter is appropriate will depend upon the nature of the activities proposed. Include a statement if a parameter listed here will not affect or be affected by the proposed activities.

a. Physical Environment. The physical environment of the area of the proposed activities to include

- (1) Environmental Geology and Hazards.
- (a) General description of geology and bathymetric map or other suitable presentation of seafloor relief.
- (b) Submarine geologic hazards, such as unstable bottom sediments (e.g., erosion, sand waves), mass wasting phenomena (e.g., landslide, mud flow, slumping, creep), shallow gas accumulations, toxic gas, geopressured zones (e.g., geopressured aquifers), karst topography, shallow faults, fill facies, and subsidence. This may include a map depicting hazard areas in relation to the proposed activity site (e.g., platform location).
- (c) Nature and extent of known mineral deposits (leased and unleased) on or adjacent to the lease.
  - (2) Meteorological Conditions.
    - (a) Temperature. Averages, extremes, and variations in temperature.
    - (b) Cloudiness and Visibility. Seasonal variations in cloudiness and visibility.
- (c) Wind Speed and Direction. Patterns and seasonal variations of wind speed and direction.
  - (d) Precipitation. Nature and amount, averages and extremes.
  - (e) Severe Weather. Frequency and magnitude of severe weather occurrences.
  - (3) Physical Oceanography.
- (a) Sea Temperature and Salinity. Variation with depth and depth of thermoor halocline.
  - (b) Currents. General direction and speed, variation with depth.
  - (c) Tides and Sea State. Variations during storms, averages and extremes.
- (4) Water Quality. A description of the existing water quality, including aquifers having potential as freshwater supplies for onshore.
  - (5) Air Quality. A description of existing onshore and offshore air quality.
- b. Biological Environment. The biotic environment of the area of the proposed activities to include
- (1) Coastal Habitats. Plant and animal species and communities that may be disturbed by the proposed activities and how they may be disturbed.
  - (2) Offshore Habitats.
- (a) Pelagic Environment. Pelagic plant and animal species and communities that may be disturbed by the proposed activities and how they may be disturbed.
- (b) Benthic Environment. Benthic plant and animal species and communities that may be disturbed by the proposed activities and how they may be disturbed.
- (c) Sensitive Underwater Features. Presence of sensitive underwater features (e.g., live-bottom areas including pinnacle features, fishing banks) in the area of the proposed activities.
- (3) Endangered or Threatened Species. Endangered or threatened species or their critical habitat that may exist in the area. Note: State if none exist.
- (4) Breeding Habitats and Migration Routes. Breeding habitats (e.g., rookeries, spawning grounds) nursery grounds, wintering grounds, and migration routes that may be disturbed by the proposed activities and how they may be disturbed.
- (5) Protected Areas of Biological Concern. Refuges, preserves, marine and estuarine sanctuaries, and areas of particular concern.
  - c. Socioeconomic Conditions and Concerns.

- (1) Economic and Demographic Conditions. Limit in scope the discussion in this part to those socioeconomic impacts that you can practically identify. For example, if you can identify impacts on a State or local level, discuss them in that context.
  - (a) Related employment and area unemployment.
  - (b) Location and size of related population and industry centers.
  - (2) Land Use. Include
    - (a) Existing community services.
    - (b) Existing transportation systems and facilities.
    - (c) Supply and/or existence of coastal resources.
  - (3) Onshore Support Facilities. Description of onshore support facilities.
- (4) Public Opinion. Public opinion as it relates to any of the proposed activities or supporting facilities and activities.
  - (5) Navigation. Transit lanes, anchorage areas, fairways, etc.
- (6) Military Warning/Use Areas. Military use, including potential hazards from undetonated explosives.
  - (7) Commercial Fishing. Types and seasons.
  - (8) Recreation. Small-craft pleasure boating, sport fishing, and recreation.
- (9) Archaeological Resources. Potential or known archaeological resources in the area. A summary of conclusions for the archaeological resource survey for the area of operation (when required). Attach a copy of the survey conclusions to the Environmental Report. Note: State if no anomalies exist or a survey was not required for the area.
  - (10) Other Commercial Uses.
- (11) Other Minerals Uses. Activities for mining sand, gravel, sulfur, salt, seafloor nodules, etc.
- (12) Pipelines and Cables. Location, use, size, date of placement, and burial information of existing pipelines and cables.
  - (13) Ocean Dumping. Dump site locations, materials dumped, date, etc.

### 5. Environmental Consequences

Describe the direct, indirect, and cumulative effects expected to occur on the onshore and offshore environments as a result of the implementation of the plan. Quantify effects wherever possible and express them in terms of magnitude and duration. Note that you need only include those adverse impacts that are not effectively minimized by your proposed mitigating measures.

- a. Accidental Hydrocarbon Discharges. Accidents with impacts on human and natural environments are not anticipated. However, when human and material resources are matched with a hostile environment, such as the OCS, the potential for accidents does exist. This section addresses this potential and any impacts on the environment resulting from an accident.
- (1) Discussion of potential impacts of a major accident. This section covers the impact of a major platform failure and/or large-scale hydrocarbon discharge (as apart from probable impacts resulting from normal operations).
- (2) Discussion of impacts from hydrocarbon discharge resulting from normal operations.
  - b. Impacts Concerning the Physical Environment.
    - (1) The effects of geologic hazards on the proposed activities, such as unstable

bottom sediments (e.g., erosion, sand waves), mass wasting phenomena (e.g., landslide, mud flow, slumping, creep), shallow gas accumulations, toxic gas, geopressured zones (e.g., geopressured aquifers), karst topography, shallow faults, fill facies, and subsidence.

- (2) The effect of the general weather patterns (temperature, sky cover and visibility, wind speed, severe weather conditions, etc.) on the proposed activities.
- (3) The effect of physical oceanographic conditions such as sea temperature, currents, tides, sea state, water depth, etc., on the proposed activities.
- (4) Effects of the proposed activities on water quality (mud and drill cuttings discharge, sewage, chemicals, and other potential pollution from OCS operations).
- (5) Potential impacts of proposed OCS activities on current nearby onshore and offshore air quality. Include a discussion of the probable extent and duration of air quality degradation and the basis for the assessment of impacts.
- c. Impacts on the Biological Environment. Potential effects of the proposed activities on the pelagic and benthic environments, including endangered species or critical habitat, other sensitive biological resources, and coastal habitats.
  - d. Impacts on Socioeconomic Conditions and Concerns.
    - (1) Impacts to economic and demographic conditions.
- (a) Effects upon local employment, including a discussion of the estimated numbers of employees required for offshore, onshore, and transport activities and the approximate number of local residents to be employed, by major skill and craft.
- (b) Effects upon local population centers and industry, including estimates of the numbers of new employees or families likely to move into an affected coastal area.
  - (2) Impacts on land use.
    - (a) Effects of increased demands on community services.
- (b) Effects of increased boat and air traffic upon existing transportation systems and facilities. Discuss proposed travel routes and frequency for moving supplies and personnel.
- (c) Effects from competition for scarce coastal resources, such as dock space. Discuss the demand for goods and services that may be purchased in the coastal zone of an affected State. Include the types of vendors or contractors you expect to be needed and that may place a demand on local goods and services. Address (i) supplies and equipment, (ii) water, (iii) aggregate energy such as electricity, oil, gasoline, and diesel fuel, and (iv) other resources.
- (3) Impacts from the construction of onshore support facilities. Include a description of facilities (location, size, and number) proposed, an assessment of acreage requirements, rights-of-way, easements, and a timetable for land acquisition and construction.
  - (4) Impacts of public opinion concerning the proposed activities.
- (5) Impacts on navigation including the use of anchorage areas, fairways, transit lanes, etc.
  - (6) Impacts concerning military use.
  - (7) Impacts on commercial fishing.
  - (8) Impacts on recreation/tourism.
  - (9) Impacts on archaeological resources.
  - (10) Impacts on other commercial uses.
  - (11) Impacts on mineral resource development other than oil and gas.
  - (12) Impacts concerning pipelines and cables.
  - (13) Impacts on ocean dumping.

- (14) Any impacts of the proposed activities on the onshore environment that have not been addressed elsewhere in this report.
- e. Unavoidable Adverse Environmental Effects. Provide a summary of adverse impacts that could occur if the plan were implemented. Include separate summaries for the activities as proposed in the plan and the alternatives you considered (if any). Note: State if you believe that no avoidable adverse impacts will result from plan implementation.

### 6. References

This section includes references to the materials you used in preparing the Environmental Report. Your list of references should contain the author, title of article, title of publication, volume, number, series, pages, date, and publisher.

### 7. APPENDICES

Append the following items, as appropriate, to the Environmental Report.

- a. Appendix 1. Any available information concerning biological and endangered and threatened species surveys.
  - b. Appendix 2. Archaeological surveys.
- c. Appendix 3. Response plans to the extent you have not included them in the plan or described them elsewhere in the Environmental Report.
- d. Appendix 4. Maps, diagrams, and photographs you have not included in the Environmental Report text or the plan and that would facilitate the presentation of data or aid in understanding potential environmental impacts. All maps should contain title, scale, legend, north arrow, OCS block, date, and source.

### IV. Federal Consistency Review Procedures and Requirements

Section 307 of the Coastal Zone Management Act (CZMA) requires any OCS plan that describes in detail activities affecting any land or water use in the coastal zone of a State with an approved CZMP be reviewed by the affected State for consistency with that State's CZMP. The States of Texas, Louisiana, Mississippi, Alabama, and Florida have approved CZMPs.

The CZMA and the OCS Lands Act, as amended, prohibit the Minerals Management Service (MMS) from approving any Federal license or permit for activities described in a plan until:

- 1. All affected States with an approved CZMP concur with your Consistency Certification, or
- 2. The GOMR conclusively presumes that all affected States with an approved CZMP concur with your Consistency Certification, or
- 3. The Secretary of Commerce makes the findings called for in Section 307 of the CZMA.

Even though you may have submitted an Environmental Report, a State with an approved CZMP may request additional or supplementary information from you to determine if the proposed activities described in detail in an OCS plan are consistent with the provisions of its CZMP. Therefore, if you intend to submit an OCS plan that describes in detail Federal license or permit activities affecting the land or water use in the coastal zone of one or more of the States having an approved CZMP, the GOMR encourages you to consult with the appropriate State agency to ascertain whether it will require such additional or supplemental information to expedite the coastal zone consistency determination. 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, the MMS, and the States. If, after future consultations with the affected State(s) and the Office of Ocean and Coastal Resource Management of the National Oceanic and Atmospheric Administration, the GOMR determines that the information to be included in Environmental Reports for coastal zone consistency determinations can be limited or otherwise changed, we will inform you of such changes.

To meet the CZMP requirements of the States of Texas, Louisiana, Mississippi, Alabama, and Florida, a Certificate of Coastal Zone Consistency must accompany a plan that requires an Environmental Report for CZM purposes. Therefore, all plans requiring Environmental Reports for Gulf of Mexico OCS activities, except those plans submitted for revised activity in Area II of the Gulf of Mexico, must be accompanied by a Certificate of Coastal Zone Consistency. Refer to Appendix I for the format to be used for the Consistency Certification.

## APPENDIX I COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION FORMAT

### A. INTRODUCTION

Submit Certificate(s) of Coastal Zone Consistency, as required by 15 CFR 930 and discussed in Section III of Appendix H, using the formats described below.

Prepare a consistency certification for the State that would be affected by the proposal, as indicated by the maps at <a href="https://www.mms.gov/homepg/offshore/plans">www.mms.gov/homepg/offshore/plans</a> permits/czmmaps.html on the Internet. Activities indicated by the maps as affecting more than one State require you to prepare a Certificate of Coastal Zone Consistency for each affected State.

Certificates of Coastal Zone Consistency should approximate the format given in Section A of this Appendix, except those for EP's and DOCD's subject to State of Louisiana CZM consistency, which should approximate the format given in Section B of this Appendix. Attach a brief set of findings to the Consistency Certification unless it is included in the Environmental Report. These findings, which are derived from the Environmental Report, should indicate that each of the proposed activities (e.g., drilling, platform placement) and their associated facilities (e.g., onshore support structures, offshore pipelines), and their effects (e.g., air, water, waste discharge, erosion, wetlands, beach access impacts) are all consistent with the provisions of the management program.

# B. Format For Use with all Texas, Mississippi, Alabama, and Florida Plans Requiring Consistency Certification.

C	COASTAL ZONE MANAGEMEN	T
	CONSISTENCY CERTIFICATION	I
	Type of Plan	
	Area and Block	
	Lease Number	
	bed in detail in this Plan comply with (s) and will be conducted in a manner	
	I a constant	-
	Lessee or Operator	
	Certifying Official	-
	Date	-

## C. Format For Use with Louisiana Exploration Plans and Development Operations Coordination Documents Requiring Consistency Certification.

According to 15 CFR 930.78(b) and 15 CFR 930.84(a), a State coastal zone management (CZM) agency is required to ensure timely public notice of the receipt of each OCS plan that has been submitted to them for their CZM consistency determination. To comply with this requirement, the State of Louisiana, on August 29, 1983, issued a special announcement that requires that the applicant ensure publication of the notice of receipt in the official journal of the State of Louisiana for each individual exploration plan (EP) that proposes activities that may affect any land or water use in the coastal zone of the State of Louisiana. Applicants were not required to provide the public notice for Development Operations Coordination Documents (DOCD), since the State of Louisiana determined that the notice of receipt of a DOCD that the Minerals Management Service (MMS) published in the *Federal Register* served that purpose.

However, the revised Federal regulations (now designated 30 CFR 250.204), which became effective May 31, 1988, no longer require the MMS to publish this notice for DOCD's. The MMS, therefore, informed the State of Louisiana that, effective October 1, 1989, we would no longer make such publications. Given these circumstances, the State of Louisiana issued a revised special announcement (see Attachment 1) that now requires applicants to ensure publication of a public notice for those EP's and DOCD's for which a CZM consistency determination is required. Please be advised that this special announcement not only requires publication in the official journal of the State of Louisiana, but also now requires publication in the official journal of the parish(es) most likely to be affected by the proposed activities. Moreover, you are now required to certify, in the certificate of coastal zone consistency accompanying each OCS plan, that arrangements have been made to make both of these publications and to provide a copy in the OCS plan of the notice that will be published. The format you use to prepare certificates of coastal zone consistency should approximate that given below:

	COASTAL ZONE MANAGEMENT	
	CONSISTENCY CERTIFICATION	
	Type of Plan	
	Area and Block	
	Lease Number	
	ibed in detail in this Plan comply with the thint Program and will be conducted in a new	
to publish a public notice of t arrangements have been made	le with the [Name of the Official Journal he proposed activities no later than [ <u>Da</u> e with the [ <u>Name(s) of Official Local Jo</u> proposed activities no later than [ <u>Date</u> ]	<u>te]</u> . Additionally, <u>urnal(s)]</u> in [ <u>Parish(es)]</u> to
-	Lessee or Operator	
-	Certifying Official	
-	Date	

### ATTACHMENT TO APPENDIX I SPECIAL ANNOUNCEMENT TO OCS OPERATORS

The Coastal Management Division (CMD) of the Louisiana Department of Natural Resources Revised Public Notice Procedures for Federal Consistency Review of Outer Continental Shelf Plans of Explorations, and Development Operations Coordination Documents

Background: The National Oceanic and Atmospheric Administration Regulations on Federal Consistency with Approved Coastal Management Programs (found at 15 CFR 930) require that timely public notice of proposed OCS plans be provided to facilitate public comments on the proposed action.

Public Notice Procedures for Exploration Plans (EP's), Development Operation Coordination Documents (DOCD's)

The CMD requires the applicant to ensure publication of the notice for each individual Exploration Plan and Development Operation Coordination Document in the official State journal and the official journal of the parish(s) most likely to be affected by the proposed activity. You can find a list of the current official parish journals at <a href="https://www.sec.state.la.us/notary-pub/pub-opj.htm">www.sec.state.la.us/notary-pub/pub-opj.htm</a> on the Internet.

The applicant should request that the public notice be published, as a legal ad, no later than a specific date and then certify to the CMD that a request has been made for publication to be provided by the specified date. Submit such certification and a copy of the public notice which was sent to the official State journal and parish journal(s) to the Minerals Management Service (MMS) with the consistency certification statement.

The requested publication date should approximate the date the CMD would receive the Exploration Plan or Development Operation Coordination Document. The publication date should be approximately 12 working days after the date the MMS would receive the proposed Exploration Plan or Development Operation Coordination. This time frame is necessary to allow for the MMS to review the plan for completeness as required by Federal regulations and mail a copy of the plan to the CMD. For example, if MMS receives an OCS plan on the first day of the month, then you can approximate that the CMD would receive the exploration plan 12 working days later. Assuming the 1st is a Monday, then the date of publication should be Tuesday, the 16th of the month.

To minimize paperwork and because the official journal of the State of Louisiana and parish journals may not mail proofs of publications for two to three weeks after the actual public notice date, you are *not* required to submit copies of the proofs of publication to the CMD. However, you should include the proofs of publication in your official files for future reference.

The State and Local Coastal Resources Management Act of 1978 requires a "reasonable" amount of time be allowed for public comment. Consequently, the CMD should receive public comments for 15 days after receipt of the Exploration Plan or Development Operation Coordination Document or the official publication date of the public notice of such, *whichever occurs later*.

The earliest time at which the Secretary of the Department of Natural Resources (DNR) or his designee may issue a consistency decision is 16 days after it receives the OCS Plan or the date of the public notice of such, *whichever occurs later*.

Unusual cases are handled by the CMD and the MMS on a case-by-case basis to provide for emergency situations. Consistency determinations are not required in advance for conducting uses necessary to correct emergency situations.

- (A) Emergency situations are those brought about by natural or manmade causes, such as storms, floods, fires, wrecks, explosions, spills, and other similar calamities that would result in hazard to life, loss of property, or damage to the environment if immediate corrective action were not taken.
- (B) This exemption applies only to those corrective actions that are immediately required for the protection of lives, property, or the environment necessitated by the emergency situation.

Before undertaking such emergency uses, or as soon as possible thereafter, the person carrying out the use should notify the Consistency Section Manager or the Director of the CMD and give a brief description of the emergency and the necessity for carrying it out without a consistency determination. The removal of any structure or works occasioned by the emergency and the restoration to the conditions existing before the emergency use may be ordered.

The Federal regulations require the public notice to provide a summary of the activity, to announce the availability for inspection of the consistency certification and accompanying information and data, and request that comments be submitted to the CMD/DNR.

The summary includes the applicant's name and mailing address, the location (i.e., area, lease number, block), the date the area was offered for lease by MMS, a general description of the proposed activities and their effects (i.e., oil or gas, generic rig type, method of transporting crews, onshore base(s) location(s), and whether there are any ecologically sensitive or unique species or habitats that may be affected by the project and, if so, what they are and the possible effects of implementing the Exploration Plan or Development Operation Coordination Document).

Below are examples of information to include in the EP and DOCD notices.

\_\_\_\_\_

Public Notice of Federal Consistency Review of a Proposed Exploration Plan (EP) by the Coastal Management Division/Louisiana Department of Natural Resources for the Plan's Consistency with the Louisiana Coastal Resources Program.

Applicant: SAC Exploration Company

400 Marsh Road New Orleans, La.

Location: Breton Sound Area, Lease OCS-G 9999,

Block 999

Lease offering date May 4, 1984

Description: Proposed Plan of Exploration for the above area provides for the

exploration for oil and gas. Exploration activities shall include drilling from a jack-up rig and transport of drilling crews and equipment by helicopter and/or cargo vessel from an onshore base located at Venice, La. No ecologically sensitive species or habitats are expected to be located near or effected by these activities.

are expected to be located near or affected by these activities.

A copy of the plan described above is available for inspection at the Coastal Management Division Office located on the 10th floor of the State Land and Natural Resources Bldg., 625 North 4th Street, Baton Rouge, Louisiana. Office hours: 8:00 a.m. to 5:00 p.m., Monday through Friday. The public is requested to submit comments to the Coastal Management Division, Attention: OCS Plans, P.O. Box 44487, Baton Rouge, Louisiana 70804-4487. Comments must be received within 15 days of the date of this notice or 15 days after the Coastal Management Division obtains a copy of the plan and it is available for public inspection. This public notice is provided to meet the requirements of the NOAA Regulations on Federal Consistency with approved Coastal Management Programs.

\_\_\_\_\_\_

\_\_\_\_\_

Public Notice of Federal Consistency Review of a
Proposed Development Operations
Coordination Document (DOCD) by the Coastal Management Division/Louisiana
Department of Natural Resources for the Plan's Consistency with
the Louisiana Coastal Resources Program

Applicant: SAC Exploration Company

400 Marsh Road New Orleans, La.

Location: Breton Sound Area, Lease OCS-G 9999

Block 999

Lease offering date May 4, 1984

Description: Proposed DOCD for the above area provides for the development

and production of hydrocarbons. Support activities are to be conducted from an onshore base located at Venice, La. No

ecologically sensitive species or habitats are expected to be located

near or affected by these activities.

A copy of the plan described above is available for inspection at the Coastal Management Division Office located on the 10th floor of the State Land and Natural Resources Bldg., 625 North 4th Street, Baton Rouge, Louisiana. Office hours: 8:00 a.m. to 5:00 p.m., Monday through Friday. The public is requested to submit comments to the Coastal Management Division, Attention: OCS Plans, P.O. Box 44487, Baton Rouge, La. 70804-4487. Comments must be received within 15 days of the date of this notice or 15 days after the Coastal Management Division obtains a copy of the plan and it is available for public inspection. This public notice is provided to meet the requirements of the NOAA Regulations on Federal Consistency with approved Coastal Management Programs.

\_\_\_\_\_\_

These procedures apply to all initial Exploration Plans, initial Development Operations Coordination Documents, and those supplemental DOCD's which propose new multiwell platforms.

## APPENDIX J PLAN INFORMATION FORM

In order to facilitate data entry and review your OCS plan, we encourage you to use the attached optional "Plan Information Form."

OMB Control No. 1010-0049 Expiration Date: September 30, 2003

## OCS PLAN INFORMATION FORM

(USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN	DE	DEVELOPMENT OPERATIONS COORDINATION DOCUMENT			IT	DEVELOPMENT & PRODUCTION PLAN		
OPERATOR:				ADDRESS:				
MMS OPERATOR NO.:								
CONTACT PERSON:				PHONE NO.				
PROPOSED START DATE: RIG TYPE: JU SS PF			DS OTHER	DISTANCE TO CLOSEST LAND (IN MILES):				
NEW OR UNUSUAL TECH	NOLOGY	YES	NO	ONSHORE	E SUPPORT BASE(S):			
NARRATIVE DESCRIPTION OF PROPOSED ACTIVITIES:								
PROJECT NAME, IF APPLICABLE:								

### PROPOSED WELL/STRUCTURE LOCATIONS

	3			
CTRLICTURE	BOTTOM-HOLE			
STRUCTURE LOCATION (FOR WE	LOCATION (FOR WELLS)			
NAME	ŕ			
	E LOE			
CALLS:F_L andF_LOF				
Platform or Well         LEASE OCS,AREA,         LEASE OCS,	AREA,			
BLOCK BLOCK				
Name: X: X:				
Y:				
LAT:				
LONG:				
TVD(IN FEET): MD (IN FEET): WATER DEPTH (IN FEE	ET):			
	·			
CALLS:F_L andF_L OF CALLS:F_L and	_ F L OF			
Platform or Well         LEASE OCS,AREA,         LEASE OCS,	AREA.			
BLOCK BLOCK	,			
Y:				
I AT:				
LAT:				
LONG:				
TVD(IN FEET): MD (IN FEET): WATER DEPTH (IN FEE	T).			
MD (EVIEDI).	,1).			
CALLS:F_L andF_LOF	F LOF			
I indivini _ Oi well	LEASE OCS,AREA,			
BLOCK BLOCK				
Name: X: X:				
Y:				
· · · ·				
LAT:				
LONG: LONG:				
TWO (N FEET) MD (N FEET) WATER DEPTH (N FEE	200)			
TVD(IN FEET): MD (IN FEET): WATER DEPTH (IN FEE	11):			
CALLS:FL andFL OF	E LOE			
Platform or Well         LEASE OCS	AREA,			
BLOCK BLOCK				
Name: X: X:				
Y:				
LAT:				
LONG: LONG:				
LONG				
TVD(IN FEET): MD (IN FEET): WATER DEPTH (IN FEE				

The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. Responses are mandatory. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.