

ENVIRONMENTAL PROTECTION AGENCY

[FRL-6176-8]

Final National Pollutant Discharge Elimination System (NPDES) General Permits for the Eastern Portion of Outer Continental Shelf (OCS) of the Gulf of Mexico (GMG280000) and Record of Decision**AGENCY:** Environmental Protection Agency.**ACTION:** Final Issuance of NPDES General Permits.

SUMMARY: The Regional Administrator (RA) of EPA Region 4 (the "Region") is today issuing final National Pollutant Discharge Elimination System (NPDES) general permits for the Eastern Portion of the Outer Continental Shelf (OCS) of the Gulf of Mexico (General Permit No. GMG280000), published at 61 FR 64876 on December 9, 1996, revised on January 7, 1998, at 63 FR 846, for discharges in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR part 435, subpart A). The existing permit, jointly issued by Regions 4 and 6 and published at 51 FR 24897 on July 9, 1986, authorizes discharges from exploration, development, and production facilities located in and discharging to all Federal waters of the Gulf of Mexico seaward of the outer boundary of the territorial seas. Region 6 issued a final permit (General Permit No. GMG290000) for the Western portion of the OCS of the Gulf of Mexico, published at 57 FR 54642 on November 19, 1992, for facilities in Federal waters seaward of Louisiana and Texas Waters. This notice constitutes the Agency's Record of Decision in accordance with Council on Environmental Quality regulations 40 CFR 1505.2 and EPA regulations 40 CFR 6.606. Draft and Final EISs were issued December 4, 1996 and August 14, 1998, respectively, that considered the range of permitting options available to EPA. Alternative A is the issuance of a general permit to cover the entire Region 4 geographic permitting area in the Gulf; Alternative B is limiting a general permit to the area seaward of the 200 meter isobath; and Alternative C is withholding general permit coverage entirely and conducting individual permit reviews for each application filed. The EIS process defined the affected environment and assessed the potential impacts of the alternatives on the natural and man-made environments. A broad spectrum of mitigation measures were considered in the EIS. To assist in the selection of

alternatives, EPA considered different types and degrees of environmental survey information, different review procedures and discharge options. Key to the decision to extend general permit coverage to the Region 4 portion of the Central Planning Area (CPA) offshore Mississippi and Alabama, was to exclude from such coverage four Areas of Biological Concern. Additionally, EPA found it necessary to require Notices of Intent for coverage submitted to the Agency to include geohazards and photodocumentation surveys. While substantial oil and gas activity has occurred and continues, EPA determined that there was inadequate site-specific marine habitat information for the CPA to draw on in making decisions on permit coverage. Today's final NPDES permits cover existing and new source facilities in the Eastern Planning Area (Alternative B of the Environmental Impact Statement (EIS)) with operations on Federal leases occurring in water depths seaward of 200 meters, occurring offshore the coasts of Florida and Alabama, and existing and new source facilities in the Central Planning Area (Alternative A of the EIS), with operations located in and discharging pollutants to federal waters in lease blocks located seaward of the outer boundary of the territorial seas offshore Mississippi and Alabama. The western boundary of the coverage area is demarcated by Mobile and Viosca Knoll leases located seaward of the outer boundary of the territorial seas from the coasts of Mississippi and Alabama in the Central Planning Area; except specific areas in the Central Planning Area which may be designated by EPA as Areas of Biological Concern (See Fact Sheet published on January 7, 1998 at 63 FR 846 and Final Environmental Impact Statement, issued August 14, 1998). The eastern boundary of the coverage area is demarcated by the Vernon Basin leases north of the 26° parallel and in water depths seaward of 200 meters.

All permittees holding leases on which a discharge has taken place within 2 years of the effective dates of the new general permits (operating facilities) in these areas must file a written notice of intent to be covered by either the new general permit for existing sources or the new general permit for new sources within 60 days after November 16, 1998 of the final determination on this action. Non-operational leases, i.e., those on which no discharges have taken place in the 2 years prior to the effective date of November 16, 1998, are not eligible for coverage under either general permit,

and their coverage under the old general permit will terminate on the effective date of the new general permits. No NOI's will be accepted on non-operational or newly acquired leases until such time as an exploration plan or development production plan has been prepared for submission to EPA. The notice of intent must contain the information set forth in 40 CFR § 122.28(b)(2)(ii) and Part I, Section A.4 of the NPDES general permit. In accordance with Oil and Gas Extraction Point Source Category; Offshore Subcategory Effluent Guidelines and New Source Performance Standards published at 58 FR 12454 on March 4, 1993, EPA Region 4 made an Environmental Impact Statement (EIS) available with the general permits for review during the public comment period that addresses potential impacts from facilities that may be defined as new sources in the context of a comprehensive offshore permitting strategy. As set forth in Section 2.4.2 of the EIS and information received, the Regional Administrator has determined that the area in the Eastern Planning Area shoreward of the 200 meter depth and certain designated areas in the Central Planning Area includes or is likely to include valuable marine habitats, including extensive live bottom and other valuable marine habitats that have not been adequately located nor fully characterized and which may be more sensitive to the discharges from oil and gas exploration and production activities. These resources potentially qualify and includes areas of biological concern, which are subject to more stringent review based on the ocean discharge criteria under Section 403 of the Clean Water Act (CWA) and findings of the Final EIS. Accordingly, individual permits reviews will be conducted for facilities on lease blocks traversed by and shoreward of the 200 meter water depth in the Eastern Planning Area and certain designated areas of biological concern in the Central Planning Area. Owners or operators of those leases will be notified in writing that an individual permit is required. A brief statement of the reasons for this decision will be provided, together with an application form and a deadline for filing the application. If a timely application is received, general permit coverage will continue and shall automatically terminate on the date final action is taken on the individual NPDES permit application, in accordance with 40 CFR § 122.28(b)(3)(ii). No application will be accepted for non-operational leases until such time as an exploration plan

or development production plan has been prepared for submission to EPA. Owners of non-operational leases and operators who neither file a notice of intent nor an individual permit application will lose coverage under the old general permit on the effective date of the new general permits, which is on November 16, 1998.

These final NPDES general permits include BPT, BCT, and BAT limitations for existing sources and NSPS limitations for new sources as recently promulgated in the effluent guidelines for the offshore subcategory at 58 FR 12454 (March 4, 1993) and codified at 40 CFR Part 435, subpart A. The permits also address a decision of the Ninth Circuit Court of Appeals by establishing limits on cadmium and mercury and by removing references to Alternative Toxicity Requests. In addition, the permits delete references to the Diesel Pill Monitoring Program, incorporate a new limitation on garbage discharges consistent with the regulations of the U.S. Coast Guard, clarify the applicability of some of the permit's effluent limitations and reporting requirements, establish aquatic toxicity limitations for produced water, and include a reopener clause.

DATES: This NPDES General Permit is effective on November 16, 1998. This NPDES General Permit shall expire on October 31, 2003.

FOR FURTHER INFORMATION: Contact Mr. Roosevelt Childress, Chief, Surface Water Permits Section, telephone (404) 562-9279, Ms. Kay Crane, Environmental Scientist, telephone (404) 562-9299, or Mr. Larry Cole, Environmental Engineer, telephone (404) 562-9474 or at the following address: Water Management Division, Surface Water Permits Section, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

SUPPLEMENTAL INFORMATION:

I. Introduction

The Regional Administrator for EPA Region 4 is today reissuing in part the National Pollutant Discharge Elimination System (NPDES) general permits for the Outer Continental Shelf of the Gulf of Mexico (General Permit No. GMG280000) under Region 4 jurisdiction. This previous permit, published at 51 FR 24897 (July 9, 1986), issued jointly for the Eastern and Western Gulf of Mexico by Regions 4 and 6, expired on July 1, 1991. Region 6 reissued a final existing permit for the Western Portion of the Outer Continental Shelf (General Permit No. GMG290000), published at 57 FR 54642

(November 19, 1992) with a modification published at 58 FR 63964 (December 3, 1993). Region 4, continued coverage under the previous OCS general permit to permittees that requested to be covered before the previous general permit expired on July 1, 1991. Region 4 proposed draft NPDES general permits for the Eastern Gulf of Mexico at 61 FR 64876 on December 9, 1996, regulating existing source and new source oil and gas OCS discharges. Region 4 revised the draft NPDES general permits for the Eastern Gulf of Mexico at 63 FR 846 on January 7, 1998. Today's final Eastern Gulf of Mexico OCS revised general permits regulate existing source and new source OCS discharges throughout the Gulf of Mexico for offshore areas under the jurisdiction of Region 4.

For reference, Region 4 published a detailed fact sheet with the proposed draft permit in 61 FR 64876 on December 9, 1996 and a revised fact sheet in 63 FR 846 on January 7, 1998. The Region is incorporating by reference the original fact sheet and revised fact sheet as part of the final fact sheet for today's final permit. The discussions presented in these fact sheets should be consulted in reviewing the applicability and scope of the final permit conditions.

II. Procedures For Reaching a Final Permit Decision

EPA has prepared draft and final EISs that evaluated the potential impacts of the proposed federal action (issuance of the general permits) within the context of a comprehensive NPDES permitting strategy for the Region 4 jurisdictional area of the Gulf of Mexico. The process was conducted in accordance with the regulations implementing the National Environmental Policy Act (NEPA). The findings of the EIS, the CWA Section 403(c) Evaluation and agency and public comments were utilized in reaching the decision to issue the general permits with the conditions and geographic limitation described herein. Important interagency coordination occurred between EPA and MMS, as prescribed by a Memorandum of Understanding. A significant amount of information and assistance was obtained from MMS. Further, a preliminary draft EIS was reviewed by MMS and that agency's comments were fully considered. Since EPA will be conducting individual permitting outside the General Permit area of new source development /production projects, EPA intends to coordinate its efforts with MMS on the environmental reviews required of each agency by NEPA.

EPA initially proposed to limit general permit coverage to waters outside the 200 meter isobath, thereby excluding all of the Central Planning Area (CPA). Extensive comments on this preferred alternative in the Draft EIS and the draft General Permit were received. EPA investigated whether general permit coverage could be appropriate for the CPA. The Minerals Management Service was consulted to determine whether significant bottom habitats have been documented adequately within the CPA. EPA determined that insufficient information on the location and characterization of habitats exists; and therefore, the geohazards and photodocumentation surveys have been added as conditions on the general permits.

EPA has considered all written comments submitted on the Final EIS, 403(c) Evaluation, the notice of revised draft general permit published on January 7, 1998, as well as all written comments submitted pursuant to the December 9, 1996 draft general permit and all comments received during the four (4) public hearings in January and February of 1997. A summary of these comments follow and are available to the public, state agencies and local governments as part of Region 4's administrative record.

A formal hearing is available to challenge any NPDES permit issued according to the regulations at 40 CFR 124.15 except for a general permit as cited at 40 CFR 124.71. Within 120 days following notice of EPA Region 4 final permit decision under 40 CFR 124.15, any interested person may appeal this general NPDES permit in the Federal Court of Appeals in accordance with 509(b)(1) of the Clean Water Act. Persons affected by a general permit may not challenge the conditions of a general permit as a right in further Agency proceedings. They may instead either challenge the general permit in court, or apply for an individual permit as specified at 40 CFR 122.21 as authorized at 40 CFR 122.28, and then request a formal hearing on the issuance or denial of an individual permit. Additional information regarding these procedures is available by contacting Mr. David M. Moore, Associate Regional Counsel at (404) 562-9547.

III. Procedures For Obtaining General Permit Coverage

Notice of Intent (NOI) requirements for obtaining coverage for operating facilities under both permits are stated in Part I Section A.4 of the general permit. Coverage under the new general permit is effective upon receipt of notification of inclusion from the

Director of the Water Management Division. EPA will act on the NOI within a reasonable period of time.

IV. Exclusion of Non-Operational Leases

These permits do not apply to non-operational leases, i.e., those on which no discharge has taken place in the 2 years prior to November 16, 1998, the effective date of the new general

permits. EPA will not accept NOI's for such leases, and these general permits will not cover such leases. Non-operational leases will lose coverage under the old general permit on the effective date of the new general permits which is November 16, 1998. No subsequent exploration, development or production activities may take place on these leases until and unless the lessee has obtained coverage under one of the

new general permits or an individual permits. EPA will not accept NOI's or individual permit applications for non-operational or new acquired leases until such time as an exploration plan or development production plan has been prepared for submission to EPA.

The new permitting requirements for leases covered under the old general permits are summarized in Table 1.

TABLE 1.—NEW PERMITTING REQUIREMENTS FOR LEASES COVERED UNDER THE OLD GENERAL PERMIT

Lease location	Discharge status	Coverage requirements	Date old general permit expires	Type of permit coverage
Central Planning Area & Outside 200 meter Isobath in Eastern Planning Area.	(1) Operational	File an NOI within 60 days of effective date of new general permit.	Date EPA Notifies Lessee of New Coverage Decision.	New General Permit, except near an Area of Biological Concern.
	(2) Leases With Imminent Projects.	File NOI At Time Exploration Plan or Development Production Plan Exists.	Effective Date of New General Permit.	New General Permit, except near an Area of Biological Concern.
	(3) Non-Operational ...	No NOI will be accepted; Ineligible for General Permit Coverage.	Effective Date of New General Permit.	None.
Inside 200 meter Isobath in Eastern Planning Area & certain designated areas in the Central Planning Area.	(1) Operational	File an individual permit application within 120 days of effective date of new general permit.	Date EPA notifies lessee of Individual permit decision.	Individual Permit.
	(2) Lessees with Imminent Projects.	File an Individual Permit Application when Lessee has Exploration Plan or Development Production Plan.	Effective date of New General Permit.	Individual Permit.
	(3) Non-Operational ...	Ineligible For General Permit Coverage.	Effective Date of New General Permit.	None.

V. State Water Quality Certification

Because state waters are not included in the area covered by the OCS general permit, its effluent limitations and monitoring requirements are not subject to state water quality certification under CWA Section 401.

VI. State Consistency Determination

Region 4 is required under the Coastal Zone Management Act (CZMA) to provide all necessary information for the States of Mississippi, Alabama and Florida to review this action for consistency with their approved Coastal Management Programs. A copy of the consistency determination on the proposed activities was sent to each affected State, along with draft copies of the draft NPDES general permit, Fact Sheet, preliminary Ocean Discharge Criteria Evaluation, and Draft Environmental Impact Statement. Each state concurred with EPA's finding of consistency. Because of the proposed change in the General Permit coverage,

EPA reviewed again the three state plans and found the revised permit coverage consistent. Accordingly, a second CZM coordination with the states occurred with the review of the Final EIS, and concurrences with Region 4's revised action were received from the three states.

VII. Administrative Record

The final NPDES general permits, fact sheet, 403(c) determination, Final EIS, public comments received, public hearing transcripts and other relevant documents on today's action are on file and may be inspected any time between 8:15 a.m. and 4:30 p.m., Monday through Friday at the address shown below. Copies of the final NPDES general permits, fact sheet, 403(c) determination, Final EIS, public comments received, public hearing transcripts and other relevant documents may be obtained by writing the U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta,

Georgia 30303-8960, Attention: Ms. LaShon Blakely, or calling (404) 562-9276.

VIII. Other Legal Requirements

Oil Spill Requirements

Section 311 of the Clean Water Act prohibits the discharge of oil and hazardous materials in harmful quantities. Routine discharges that are in compliance with NPDES permits are excluded from the provisions of section 311. However, the permits do not preclude the institution of legal action or relieve permittees from any responsibilities, liabilities, or penalties for other, unauthorized discharges of oil and hazardous materials that are covered by section 311 of the Act.

Endangered Species Act

The Endangered Species Act (ESA) allocates authority to, and administers requirements upon, federal agencies regarding endangered species of fish, wildlife, or plants that have been

designated as critical. Its implementing regulations (50 CFR Part 402) require the RA to ensure, in consultation with the Secretaries of Interior and Commerce, that any action authorized, funded or carried out by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat (40 CFR 122.49(c)). Implementing regulations for the ESA establish a process by which agencies consult with one another to ensure that issues and concerns of both the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) collectively are addressed. The NMFS and USFWS have responded to EPA's initiation of the coordination process under the regulations set forth by section 7 of the Endangered Species Act. The 36 species identified by NMFS and USFWS as threatened or endangered species within the permit coverage area have been assessed for potential effects from the activities covered by the proposed permit in a biological assessment incorporated in the Draft EIS. This biological assessment was submitted to the NMFS and USFWS along with the proposed permit for consistency review and concurrence on the Region's finding of no adverse effect. This coordination is appended to the Final EIS. Concurrence from USFWS was received on 7/30/98, with EPA's findings that the permits would not affect the continued existence or critical habitat of federal listings of endangered or threatened species. The NMFS having provided comments on the Draft EIS, provided concurrence on the modification of the project.

Ocean Discharge Criteria Evaluation

For discharges into waters located seaward of the inner boundary of the territorial seas, the Clean Water Act at section 403, requires that NPDES permits consider guidelines for determining the potential degradation of the marine environment. The guidelines, or Ocean Discharge Criteria (40 CFR part 125, subpart M), are intended to "prevent unreasonable degradation of the marine environment and to authorize imposition of effluent limitations, including a prohibition of discharge, if necessary, to ensure this goal" (45 FR 65942, October 3, 1980).

An Ocean Discharge Criteria Evaluation (ODCE) determination of no unreasonable degradation has been made by Region 4 based on an analysis by Avanti Corporation (1998a). The potential effects of discharges under the proposed permit limitations and conditions are assessed in this revised document available from Region 4. The

ODCE states that, based on the available information, the permit limitations are sufficient to determine that no unreasonable degradation should result from the permitted discharges.

Marine Protection, Research, and Sanctuaries Act

No marine sanctuaries as designated by the Marine Protection, Research, and Sanctuaries Act exist in the area to which the OCS permit applies.

Executive Order 12866

The Office of Management and Budget has exempted this action from the review requirements of Executive Order 12291 pursuant to section 8(b) of that order. Guidance on Executive Order 12866 contain the same exemptions on OMB review as existed under Executive Order 12291. In fact, however, EPA prepared a regulatory impact analysis in connection with its promulgation of guidelines on which a number of permit's provisions are based and submitted it to OMB for review. See 58 FR 12494.

Paperwork Reduction Act

The information collection required by these permits has been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, in submission made for the NPDES permit program and assigned OMB control numbers 2040-0086 (NPDES permit application) and 2040-0004 (discharge monitoring reports).

All facilities affected by these permits must submit a notice of intent to be covered under the eastern Gulf of Mexico OCS general permit GMG280000. EPA estimates that it will take an affected facility three hours to prepare the request for coverage.

All affected facilities will be required to submit discharge monitoring reports (DMRs). EPA estimated DMR burden for the existing permit to be 36 hours per facility per year. The DMR burden for these proposed permits is expected to increase slightly due to the additional reporting required for calculating the critical dilution for produced water discharges. While this permit requires some increased monitoring and reporting of that data, the DMR burden for the proposed permits is estimated to increase slightly and facilities affected by this permit reissuance were subject to similar information collection burdens under the existing Gulf of Mexico OCS general permit that this proposed reissuance will replace.

Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act (UMRA), Public Law 104-4, generally requires Federal agencies to assess the effects of their "regulatory actions" on State, local, and tribal governments and the private sector. UMRA uses the term "regulatory actions" to refer to regulations. (See, e.g., UMRA section 201, "Each agency shall * * * assess the effects of Federal regulatory actions * * * (other than to the extent that such regulations incorporate requirements specifically set forth in law)" (emphasis added)). UMRA section 102 defines "regulation" by reference to section 658 of Title 2 of the U.S. Code, which in turn defines "regulation" and "rule" by reference to section 601(2) of the Regulatory Flexibility Act (RFA). That section of the RFA defines "rule" as "any rule for which the agency publishes a notice of proposed rulemaking pursuant to section 553(b) of the Administrative Procedure Act (APA, or any other law * * *".

NPDES general permits are not "rules" under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits also not subject to such a requirement under the CWA. While EPA publishes a notice to solicit public comments on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide an "opportunity for a hearing." Thus, NPDES general permits are not "rules" for RFA or UMRA purposes.

EPA has determined that the proposed permit would not contain a Federal requirement that may result in expenditures of \$100 million or more for State, local and tribal governments, in the aggregate, or the private sector in any one year.

The Agency also believes that the permit would not significantly nor uniquely affect small governments. For UMRA purposes, "small governments" is defined by reference to the definition of "small government jurisdiction" under the RFA. (See UMRA section 102(1), referencing 2 U.S.C. 658, which references section 601(5) of the RFA.) "Small governmental jurisdiction" means government of cities, counties, towns, etc. with a population of less than 50,000, unless the agency establishes an alternative definition.

The permit, as proposed, also would not uniquely affect small governments because compliance with the proposed permit conditions affects small governments in the same manner as any other entities seeking coverage under the permit. Additionally, EPA does not

expect small government to operate facilities authorized to discharge by this permit.

Regulatory Flexibility Act

The Regulatory Flexibility Act, 5 U.S.C. 601 et seq, requires that EPA prepare a regulatory flexibility analysis for regulations that have a significant impact on a substantial number of small entities. As indicated above, the permit issued today is not a "rule" subject to the Regulatory Flexibility Act. EPA prepared a regulatory flexibility analysis, however, on the promulgation of the Offshore Subcategory guidelines on which many of the permit effluent limitations are based. That analysis shows that issuance of this permit will not have a significant impact on a substantial number of small entities.

Dated: October 7, 1998.

John H. Hankinson, Jr.,

Regional Administrator, EPA Region 4.

Summary of Public Comments

Public notice of the draft permit reissuance was published at 61 FR 64876 (December 9, 1996) with a notice to hold public hearings on the Region's proposal. 4 public hearings were held on the proposed NPDES General permit, Fact sheet, Ocean Discharge Criteria Evaluation and Draft Environmental Impact Statement on January 28, 1997 in Ocean Springs, MS, January 29, 1997 in Gulf Shores, Alabama, January 30, 1997 in Pensacola, Florida and February 4, 1997 in St. Petersburg, Florida. Additionally, the Region published a revised general permit at 63 FR 846 (January 7, 1998). The Region also received comments on the Final Environmental Impact Statement which Notice of Availability was published at 63 FR 43698 (August 14, 1998). Copies of comments received during this action from interested parties have been considered in a formulation of a final determination regarding Region 4's final action today on the reissuance of NPDES Permit No. GMG280000. A summary of only the permit related comments are summarized below; however, other comments on the Final Environmental Impact Statement and Ocean Discharge Criteria Evaluation were received by the Region and taken into consideration in the formulation of the Region final decision on reissuance of the general permit and are part of Region 4's administrative record.

Summary of Comments on the Final EIS and Permit Related Comments

Summary of Final EIS Comments

Sixteen comment letters were received during the Final EIS comment

period from the following: US Fish and Wildlife Service; C.A. Wise Elementary School, Pensacola, FL; Rosie Heindl, Pensacola, FL; Mississippi Department of Marine Resources; Linda G. Sherman, Cantonment, FL; Barbara and Lex Mohon, Gulf Breeze, FL; D.E. Walgis, Pensacola, FL; Southwest Florida Regional Planning Council; Town of North Redington Beach, FL; Lois Silberstein, Pensacola, FL; Marsha King, Cantonment, FL; Wendy Tennant, Cantonment, FL; City of Gulf Shores, AL; Chevron U.S.A., Inc.; Alabama Department of Environmental Management; and Florida Department of Community Affairs.

The following comments raise new concerns or are of a substantive nature needing further response. Otherwise, the letters present issues already addressed adequately by EPA in the text and response to comments printed in the Final EIS and in the responses set forth below.

Comment 1: Comments by the City of Gulf Shores

Waters offshore Alabama should be treated with the same environmental sensitivity as waters offshore Florida; individual permitting should be conducted rather than easier blanket general permitting; EPA has placed little or no value on the visual pollution caused by towers as close as 3 miles offshore; believe the local economy, dependent on beaches, clean water and visual aesthetics, was not adequately or accurately assessed by EPA.

Response: In general, the waters offshore Mississippi and Alabama have less hard bottom areas that increase marine life diversity. Most scientists consider this a natural condition related to the geology of the bottom and the influx of sediment loads from major rivers. With the required submittal of geohazard and photodocumentation surveys with application for General Permit coverage, EPA believes impacts of wastewater discharges on potential sensitive habitats offshore Alabama can be minimized or avoided. If state or federal water monitoring shows near-shore Gulf water quality decreasing, EPA can reconsider the adequacy of the general permit effluent limits. The near-shore state and federal waters off the Ft. Morgan peninsula and Dauphin Island have oil and gas industry structures visible from the peninsula. The EIS states that structure visibility to beach communities is an aesthetic factor but not likely to decrease tourist visits. EPA is unaware of accepted methods to relate aesthetic impacts to coastal community economics. While the EIS assessed the impact of the offshore oil

and gas industry on the local economy, that economy is changing. The Alabama coast is becoming heavily developed and the economic value of its tourist and retirement-based economy is growing rapidly in comparison to the presently depressed market value of the offshore oil and gas. It should be noted that the area seaward of the City of Gulf Shores and eastward is within the Eastern Planning Area and subject to EPA individual permitting. All environmental issues and public concerns will be considered in making decisions on issuances of individual permits.

Comment 2: Comment by the Town of North Redington Beach, FL

Permitting oil and gas facilities within the area known as the Dead Zone near the outlet of the Mississippi River would not be ecologically rehabilitative.

Response: The Region 4 permitting is presently not within this area where scientists have documented a 6000 to 7000 square mile area of the Gulf offshore Louisiana with extremely low dissolved oxygen during the hot months of recent years. However, bottom waters not far from the Alabama coast have infrequent seasonal episodes of lowered dissolved oxygen.

Comment 3: Comments by Barbara and Lex Mohon, Gulf Breeze, FL

Permitting decisions for projects should await completion of socio-economic studies available after year 2002; EPA should not continue to support extracting small amounts of fossil fuel at the end of the fossil fuel era.

Response: EPA is aware of the socio-economic studies being conducted by MMS. However, EPA does not control oil and gas activity and must be prepared to consider applications for NPDES permits resulting from MMS lease sales. The agency will consider any relevant information available at the time of permit applications. EPA must remain objective when it considers permit applications on the issue of hydrocarbon vs. alternative energy sources and must refer to the National Energy Policy authored by the Department of Energy.

Comment 4: Comments by David Duplantier, Chevron U.S.A., Inc.

Questions whether EPA included into the project record all of Chevron's comments, provided to EPA as attachments to their letter.

Response: There are over 200 commenters, with 105 of these in written form. Some letters had attachments. EPA followed the rule of

reason in the decision to print only the main comment letters and not attachments, and also to condense and group comments by topic in order to keep the Final EIS document and this final permit issuance notice from becoming excessive in size. Chevron's attachments were reviewed and the subject of those lengthy attachments responded to Section 5.5 of the Final EIS and the responses set forth below. Accordingly, readers are referred to comment/response subject groups and may not see their comments responded to item after item. All letters with any attachments have been included in the project record.

Comment 5: Comment by James Murley, Florida Department of Community Affairs

Indicates the State will continue to review both general permit coverage and individual permits for consistency with the State plan.

Response: EPA acknowledges the State's desire to review proposed General Permit coverage. It is important to note that EPA's action of granting such coverage for specific projects is not subject to formal Coastal Zone Management Act (CZMA) consistency review procedures. However, EPA intends to coordinate with the State thereby providing opportunity to offer comments. Issuance of an individual NPDES permit is an indirect federal action that requires applicants to submit a consistency determination of their project to the State for review under CZMA procedures. Therefore, the State of Florida would have a review of a project, whichever permitting mechanism applies.

Comment 6: Comment by James Murley

The State appreciates the opportunity to work with EPA to further define resources as "areas of biological concern".

Response: Defining "areas of biological concern" is a valuable process for minimizing or avoiding adverse impacts. The State of Florida has a strong marine research program and expertise in evaluating marine ecosystems. EPA would entertain nominations from the State and undertake coordination with MMS and other federal agencies leading to potential designations relevant to the NPDES permitting program.

Summary of Permit Related Comments

Comment 1: The commenters state the "because the Gulf cannot withstand further pollution, a "zero discharge" stipulation must be added to option B."

Response: While the stated goal of the CWA is to eliminate the discharge of pollutants into navigable waters, it also specifies a progressive step-wise approach for technology-based limitations (i.e., BPT, BAT, and NSPS limitations); water quality criteria are developed on a chemical-by-chemical basis and are intended to be protective for both human health and aquatic organisms; Section 403 for marine dischargers requires EPA to assess ten specific factors and only issue a permit if "no unreasonable degradation" will occur (or where information is insufficient, EPA determines the discharge will not cause irreparable harm, there are no reasonable alternatives to the on-site disposal of the materials, and the discharger complies with other conditions including monitoring and adequate effluent limitations). The Agency does not believe that the health of the Gulf of Mexico is jeopardized by the permit with the limitations and conditions developed by the Region. Additionally, EPA may require any discharger authorized by this general permit to apply for and obtain an individual permit as specified in this permit and in EPA regulations, including in instances where the discharge is a significant contributor of pollutants. See 40 CFR § 122.28(c), 122.28(b)(3). One such instance may arise where water quality standards, or criteria may be exceeded by a discharge which would otherwise be subject to this general permit. The permit and regulations provide that under these circumstances EPA may exercise its discretion to require an individual permit.

Comment 2: The commenter stated his support for deep well injection of drilling muds and cuttings as a permitting option for disposing of this wastestream.

Response: EPA investigated deep well injection as a method of disposal of drilling muds and cuttings during the development of the Offshore Effluent Guidelines (EPA, 1993). EPA agrees with the commenter that the technology of deep well injection of drilling wastes currently exists. However, not all facilities located in the offshore regions are able to inject. Subsurface injection requires different formation zones with appropriate characteristics (e.g., porosity and permeability) that are separate from the production formation. In some instances, there is significant risk that the injected material could interfere with hydrocarbon recovery (EPA, 1996). EPA concluded for the Offshore Effluent Guidelines that this technology did not constitute the Best Available Technology Economically

Achievable (BAT) for the offshore industry or for coastal facilities in Cook Inlet, Alaska.

Comment 3: The commenter stated his support for those technologies that are designed to reduce the amount of drilling mud that is discharged and also the toxicity of that mud. The commenter opposes any regulation that promotes hauling of cuttings and stagnates improvements on drilling mud technology. Some of the consequences that may result from hauling cuttings to shore are: increased air pollution, decreased landfill space, and potentially encouraging the use of more toxic, older drilling fluids technologies.

Response: EPA agrees with the commenter and considers drilling mud innovations that reduce waste volumes and are less toxic to be positive technological developments in promoting environmental protection. However, EPA's mandate is to evaluate the environmental impacts of discharges resulting from the use of new technologies. The evaluation considers current industry practices and the best available technology economically achievable in reducing pollutant concentrations from the discharged wastestream. In some cases, such as for oil-based drilling fluids (OBM), the toxicity and environmental impacts of OBM discharge cannot be sufficiently mitigated in any way other than by a discharge prohibition based upon current information. EPA evaluated the consequences of prohibiting OBM discharges, including its technological feasibility and economic achievability, increased air pollution from boat traffic, and landfill space capacity, and found that these consequences result in substantially lower environmental impacts than the continued discharge of OBM.

For this general permit, EPA is not authorizing the discharge of synthetic drilling muds or synthetic oils. EPA is currently considering the environmental impacts from the use of these substances and appropriate effluent limitations for their use and discharge. Applicants who wish to discharge synthetic drilling muds or oils should submit an individual permit application to EPA.

Comment 4: The commenters question the use of monitoring to determine the need for additional regulation given that harmful effects may be discovered too late to prevent irrevocable harm. Also, how is the data tracked and monitored by EPA?

Response: For permitted discharges, with all of the limitations and conditions imposed under this permit, and with specified monitoring, the Agency feels that the danger of

irrevocable harm is not at issue. Monitoring allows the Agency to assure that its assumptions about effluent and operational characteristics used to develop a permit that results in "no unreasonable degradation" are continuously tested and verified through compliance monitoring data submitted by operators on Discharge Monitoring Reports (DMRs). Monthly DMR data submitted, is entered into an enforcement data base that is programmed to identify violations. The data are also reviewed by enforcement staff in cases where the data are not readily obtained from a data base (e.g., monitoring reports). This information is available to the public and other entities for many purposes, including assessment of potentially harmful effects of discharges.

Comment 5: Many commenters requested 24-hour on-site monitoring by Minerals Management Service or EPA inspectors, to avoid further illegal discharges of toxic waste, and a practice of manifesting all supplies and chemicals transported to and from rigs.

Response: The Clean Water Act, the primary law passed by the U.S. Congress to protect the waterways of the U.S., defines the National Pollutant Discharge Elimination System (NPDES) as the mechanism by which EPA may grant permits to industries that discharge effluent into U.S. waters. Per the Clean Water Act, the NPDES was designed to be an industry self-monitoring system with enforcement conducted by EPA. In compliance with NPDES permit requirements, EPA requires industry to monitor numerous pollutant concentrations and toxicity of discharges from oil and gas exploration and production operations. Discharge monitoring reports (DMRs) and laboratory data from independent laboratories are sent to EPA. EPA enforcement personnel review the DMRs and, if deemed necessary, will inspect the facility to take samples for verification or to review on-site operations and documentation. EPA has the authority to visit any industrial facility to which it grants a NPDES permit.

The Minerals Management Service (MMS) and the U.S. Coast Guard (USCG) also have jurisdiction in regulating oil and gas operations and discharges. Because both of these agencies' purview is different than the EPA's, MMS and the USCG frequently inspect oil and gas facilities. EPA has coordinated inspections with MMS and USCG and has shared information to minimize duplicative inspection efforts.

In addition, 24-hour monitoring by either MMS, USCG, or EPA is not

feasible because the U.S. Congress does not provide any of these agencies the funding to conduct such a labor intensive effort. In fact, if EPA conducted 24-hour monitoring for each oil and gas facility under NPDES permits, they would also have to conduct the same level of monitoring for all industries discharging under the NPDES permit program. For Region 4, this constitutes thousands of facilities.

The CWA provides for a self-monitoring permitting program, with civil penalties for failure to comply with the Act. Criminal penalties may result in situations where a facility fails to comply with permit provisions, falsifies information submittals, or in the case of other more egregious violations of the Act.

Comment 6: The commenter suggests that the toxicity test references be updated to refer to the newer EPA methodology.

Response: The permit has been updated to refer to the 1993 document "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" EPA/600/4-90/027F, August 1993.

Comment 7: The commenter suggests that the Region 4 general permit incorporate the produced water toxicity monitoring frequency requirements that are in the Region 6 permit for the territorial seas of Louisiana. The frequency is based on the critical dilution achieved at each facility and is reduced to once per year if discharger has met the toxicity limit for 12 consecutive months.

Response: Since produced water limitations based on available technology are currently being required to be reported on a monthly basis, the Region agrees that some frequency reduction should be considered for facilities that consistently meet the produced water limitation. The Region has decided to reduce the frequency from once/month to once/2 months for the first year; similar to other industrial facilities toxicity requirements in the Region. Facilities that pass six consecutive produced water toxicity tests for six will be allowed to change to a frequency of once/every six months; otherwise bimonthly testing shall continue. This frequency is adequate to ensure compliance with the produced water toxicity limitation is being achieved for the life of permit.

Comment 8: The commenter suggests that monitoring the oil content of drilling fluids is not necessary with the other restrictions in place (i.e., no free oil, static sheen test, no diesel). If the

monitoring is necessary, a method should be specified.

Response: EPA Region 4 agrees with the commenter that the permit is incorrect and has deleted requirements under the last sentence in Part I. Section B.1(c) for monitoring for the oil content of drilling fluids in final issuance of the permit, since the static sheen test requires testing for compliance with the no free oil limitation before discharge can occur.

Comment 9: The commenter asks that the oil content monitoring requirement be added to Tables 2 and 3 for completeness.

Response: EPA agrees with the commenter since the and deleted these requirements from the final NPDES general permit, Part I. Section B.1(c), since the static sheen test requires testing for compliance with the no free oil limitation before discharge can occur.

Comment 10: The commenter requests that Region 4 adopt the same notification response approach as Region 6. That is that the operator must notify EPA at least 14 days before commencement of discharge. Unless the operator is otherwise notified by EPA prior to discharge, he may assume he is covered by the general permit. Region 4's permit does not allow operators to plan operations until notification is received.

Response: Based on different informational requirements that the Region is requiring in the NOI's, Region 4 has elected to maintain these notification requirements in the final permit. General permit coverage for these leases shall be upon receipt of notification of coverage from Region 4.

Comment 11: The commenter recommends that monitoring requirements for parameters not limited by the permit be deleted from the permit (e.g., volumes of drilling fluids, cuttings, and deck drainage). They were previously monitored for development of offshore guidelines but their continued monitoring is a burden on operators.

Response: In accordance with Section 402(o)(1) of the Clean Water Act, the Region must consider more stringent conditions of the existing NPDES general permit. Since Effluent Guidelines place limits and monitoring requirements on this wastestream and the monitoring requirements were included in the previous general permit, Region 4 has decided to maintain these requirements in the reissued NPDES general permit. The monitoring requirements referenced constitute valid measurements of pollutant discharge, frequency and/or concentration and

accordingly are appropriate monitoring and reporting requirements under the CWA.

Comment 12: The commenter recommends that the monitoring frequency of drilling fluids, drill cuttings, and miscellaneous wastes for free oil be reduced from once per day to once per week.

Response: Because these discharges are intermittent, and may differ substantially from day to day, the Region believes that daily monitoring, also a condition of the previous general permit is appropriate. Therefore, Region 4 will maintain the proposed monitoring frequencies for compliance purposes in the reissued NPDES general permit.

Comment 13: The commenter points out that the general permit issued by Region 6 covering the western Gulf of Mexico uses the Inland silverside minnow instead of the sheepshead minnow for produced water toxicity testing requirements.

Response: The Agency agrees with the commenter and has changed the toxicity test vertebrate species requirements for produced water from sheepshead minnows (*Cyprinodon variegatus*) to the Inland silverside minnow (*Menidia beryllina*). The standard test method is 1006.0 as is found in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" Fourth Edition. EPA/600/4-90/027F.

Comment 14: The commenters state that EPA does not "have enough information to issue permits for offshore drilling near Florida shores." Mentioned statements in the EIS regarding impacts of discharges and that by allowing industry to drill for oil and gas in the Eastern Gulf of Mexico, the government ignores huge gaps in information on the effects of drilling.

Response: EPA has noted the commenters statements regarding impacts of discharges into the Gulf of Mexico and agrees that in some instances information may not be available regarding the environmental effects of drilling for portions of the Gulf. For this reason, EPA chose the alternative set forth in the draft EIS consistent with available information. In addition, EPA acknowledges that all environmental effects of discharges into marine waters cannot be measured and known with absolute certainty. However, Section 403(c) of the Clean Water Act provides EPA with the authority to make the determination at 40 CFR 125.122, based on existing information if EPA determines that the discharge will cause no unreasonable

degradation of the marine environment under the NPDES permit.

EPA has evaluated available data, including information submitted pursuant to public comment on the draft EIS and permit, and has found it to be adequate to assess the potential impacts to marine waters, endangered species, marine life including the benthos for dischargers in compliance with permit conditions to those areas of the Gulf of Mexico covered by this general permit. EPA has determined that, though some impact may occur, "unreasonable degradation" will not result due to the permit issuance, based upon the analysis set forth in the Ocean Discharge Criteria Evaluation and all information submitted by commenters to the draft permit, EIS, and other information set forth in the administrative record.

Comment 15: The commenter expressed the desire for public input into the permitting of "each and every well that you intend to force on us."

Response: The current National Pollutant Discharge Elimination System (NPDES) permitting process was determined by the U.S. Congress and is outlined in the Clean Water Act. According to the NPDES regulations, EPA is allowed to promulgate general permits for discharges into federal waters. The Minerals Management Service of the Department of the Interior issues permits for oil and gas drilling operations. EPA is authorized to issue permits for the discharges generated from these drilling and production operations, where appropriate and consistent with the requirements of the CWA. Use of a general permit does not prohibit public input on each and every potential operation, which can be provided to the Agency at any time. The general permit merely provides an administrative mechanism for regulating a category of discharge sources which involve substantially similar operations, discharge the same types of waste, require similar monitoring and effluent limits, and which are more appropriately controlled under a general permit rather than individual permits, 40 CFR 122.28. For general permits, EPA solicits public input regarding the entire category of discharge sources to be addressed via formal public notice and comment procedures for the general permit, as set forth at 40 CFR 124.10.

EPA has identified regions within the Gulf of Mexico for which less information regarding potential impacts are available, or that are more sensitive and require discharges to be reviewed on a case by case basis. These areas are within the 200 meter isobath in the Eastern Planning Region and within 1,000 meters of areas of biological

concern. The general permit does not cover these areas and instead EPA is requiring operators to submit an application for an individual permit.

Additionally, there are 4 features that are described in the revised permit and Fact Sheet that may warrant case-by-case review and will be subject to a public notice comment period. Therefore, the Regional Administrator has the authority to issue individual permits after proper notice has been provided to the permittee and public input is solicited on these individual permits during the public notice comment period.

Comment 16: The commenter states that "there is a lack of scientific data regarding impacts to live bottom areas from oil and gas discharges within 1,000 m of the areas. A prohibition on these discharges is not warranted at a distance of 1,000 m as this is too conservative."

Response: The prohibition does not apply to discharges, but refers to an exclusion of coverage under the general permit. Operators may apply for an individual NPDES permit that will allow EPA to determine the appropriate conditions and monitoring for each site. EPA also believes there are adequate data to assess potential benthic effects within 1,000 m of discharge from permitted dischargers.

Comment 17: The commenter feels that authorization of discharge of drill cuttings from synthetic-based drilling mud systems should be added to the general permit. In the final Coastal Effluent Guidelines, the Agency recognized that additional categories of drilling fluids, specifically Synthetic Based Mud (SBM) and Enhanced Mineral Oil (EMO), were warranted. The eastern OCS general permit should do the same.

Response: EPA is aware that the oil and gas industry has developed additional drilling fluid types, including synthetic fluid-based muds (SBM) and has acknowledged this new technology within the permit. EPA Headquarters is currently developing effluent limitations guidelines (ELGs) for SBMs. Once the final ELGs are published, EPA Region 4 may consider modifying the existing permit to incorporate SBMs per the limitations of the guidelines. For this permit, however, SBMs are not authorized for discharge. As stated above, persons who wish to discharge SBMs should submit an individual permit application.

Comment 18: The commenter states that because EPA has determined that the discharge will not cause unreasonable degradation of the marine environment, the permit should be a

general permit covering facilities discharging to water of all depths.

Response: The Region has determined that the most effective manner in which to manage the effects of discharges to more shallow waters (<200 m) in the Eastern Planning Area is to require operators to obtain individual permits. Additionally, the revised January 7, 1998 **Federal Register** publication of the general permit proposed to extend permit coverage into the Central Planning Area. This revision is based on additional information submitted by the public pursuant to the December 9, 1996 proposed permit that Region 4 considered and responded to.

EPA has examined the available literature on the distribution of important benthic communities, fisheries habitats, and marine mammal habitats and has found that the areas over the continental shelf and shelf transitional zone (approximated by the area out to the 200 meter isobath) contain an abundance of sensitive biological resources, particularly offshore Florida and Alabama in the Eastern Planning Area and in the excluded features identified in the Central Planning Area. Consistent with the literature review noted above, EPA concludes that due to the abundance and sensitivity of the biological resources in the area offshore Florida and Alabama in the Eastern Planning Area, and features identified in the Offshore Central Planning Area, extra protection can be afforded by the thorough, case-by-case review possible with individual permits in these areas.

Comment 19: The commenter states "EPA has many years of experience regulating and observing impacts from offshore oil and gas facilities located in waters shallower than 200 meters in Region 4 as well as other regions. EPA has the ability to impose various restrictions on discharges in specific areas that are determined to be of high habitat or resource value. The draft permit contains one such restriction—a prohibition of discharges within 1000 meters of areas of biological concern. By placing such high value areas off limits, EPA has greatly reduced its uncertainty about causing unreasonable degradation."

Response: EPA agrees with the commenter that the current permit contains discharge limitations, such as the requirement to apply for an individual permit for facilities located within 1,000 m of areas of biological concern, ensure no unreasonable degradation of marine waters will occur within the permit coverage area. EPA has examined the available literature on the distribution of important benthic

communities, fisheries habitats, and marine mammal habitats and has found that the areas over the continental shelf and shelf transitional zone (approximated by the area out to the 200 meter isobath) contain an abundance of sensitive biological resources, particularly offshore Florida and Alabama in the Eastern Planning Area and in the Excluded features identified in the Central Planning Area. Consistent with the literature review noted above, EPA concludes that due to the abundance and sensitivity of the biological resources in the area offshore Florida and Alabama in the Eastern Planning Area, and features identified in the Offshore Central Planning Area, extra protection can be afforded by the thorough, case-by-case review possible with individual permits in these areas. EPA has reached this conclusion based on the ODCE. The ODCE outlined potential environmental impacts resulting from the permit and found that the permit will not cause unreasonable degradation.

Comment 20: The commenter finds no rationale for excluding facilities located in depths of 200 meters or less from the general permit based on the lack of significant environmental or biological impacts from discharges.

Response: EPA has examined the available literature on the distribution of important benthic communities, fisheries habitats, and marine mammal habitats and has found that the areas over the continental shelf and shelf transitional zone (approximated by the area out to the 200 meter isobath) contain an abundance of sensitive biological resources, particularly offshore Florida/Alabama Eastern Planning Area and in the excluded features identified in the Central Planning Area. Consistent with the literature review noted above and the EIS, EPA concludes that due to the abundance and sensitivity of the biological resources in the area offshore Florida and Alabama in the Eastern Planning Area, and features identified in the Offshore Central Planning Area, extra protection can be afforded by the thorough, case-by-case review possible with individual permits in these areas.

Comment 21: The commenter recommends that the general permit be modified to require toxicity monitoring for produced water but not place limits on the waste stream. Produced water can have a salinity as high as 300 ppt and the test organisms may be adversely affected given their limited salinity tolerance range (cultured at 20–30 ppt).

Response: EPA has statutory and regulatory requirements to comply with CWA Section 403 and 40 CFR 125 Part

M (Ocean Discharge Criteria) which require a waste stream to not exceed $0.01 \times LC50$ at the edge of the mixing zone. Because a standard toxicity test methodology exists for this waste stream, EPA is utilizing it to ensure compliance with the statute.

The commenter is correct in that the salinity of produced water may adversely affect the test organisms. However, the toxicity of salinity is integrated into the test protocol for produced water. Also, the dilution required to achieve a specified toxicity, including the dilution of salinity effects, is accommodated in the CORMIX surface water quality model. Therefore, the commenter's concern is correct in that salinity effects occur; however, dilution of produced water in salt water media during effluent toxicity testing accounts for the dilution of this salinity effect.

Comment 22: If EPA elects to maintain toxicity limits for produced water, the commenter supports establishing site-specific toxicity limits.

Response: The commenter's approval is noted. For produced water outfalls, each operator will be required to test for compliance with a site-specific toxicity limit after wells begin to produce water from reservoirs.

Comment 23: The commenter claims that the equation used to develop toxicity limits for produced water is inconsistent in the proposed permit.

Response: The Agency has reviewed the equations provided in the permit and they are correct. The toxicity limitation (applied at the end of the pipe) is derived to represent the effluent concentration at the edge of the mixing zone times 0.01 (as required by CWA Section 403 and 40 CFR Part 125, Ocean Discharge Criteria). This calculation of an end-of-pipe limitation requires the estimation of the number of dilutions achieved by the edge of the mixing zone. The toxicity limitation is calculated as $0.01 \times \text{effluent concentration at 100 m}$ (i.e., $0.01 \times \text{effluent concentration/no. of dilutions at 100 m}$).

Comment 24: Over the past several years, the industry has developed new types of synthetic-based drilling fluids that combine the superior drilling performance of oil-based fluids with the low environmental impacts of water-based fluids. Other new drilling fluids utilize enhanced mineral oils as the base fluid. Although the discussion group has not yet focused on enhanced mineral oil, the technology offers good potential. EPA agreed to include new explanatory information and definitions concerning synthetics and enhanced mineral oils in its final coastal oil and

gas effluent limitations, which were published on December 16, 1996. The commenter recommends that Region 4 incorporate the effluent limitations guidelines definitions for drilling fluid, enhanced mineral oil, and synthetic material (40 CFR 435.11 (l), (j) and (x)) in the general permit.

Response: EPA acknowledges the offshore oil and gas exploration and production industry use of synthetic-based drilling fluid and is currently developing effluent limitations guidelines for this new technology. The EPA Region 4 general permit for the Eastern Gulf of Mexico region will not authorize discharges of synthetic based drilling fluids. However, after the SBM effluent limitations guidelines have been promulgated, EPA Region 4 may consider modification of the existing general permit to incorporate the limitation of the guidelines.

Comment 25: To avoid any unnecessary prohibition on the use of improved drilling fluid technology due to uncertainty about what constitutes an inverse emulsion, the commenter recommends that the prohibition of oil-based drilling fluids be modified by deleting "and inverse emulsion drilling fluids." Likewise, the prohibition of cuttings from oil-based drilling fluids should be modified by deleting "or invert emulsion". Alternatively, the definition of inverse emulsion drilling fluids could be modified to specifically exclude synthetic-based fluids.

Response: Inverse emulsion drilling fluids are drilling fluids in which an oil, including synthetic oils, is the continuous phase and water is the dispersed phase. Synthetic drilling fluids (SBMs) are considered a type of inverse emulsion drilling fluid. EPA Region 4 will not authorize discharge of synthetic-based drilling fluids within the general permit for the Eastern Gulf of Mexico region at this time. However, EPA acknowledges the use and benefits of SBMs and is currently developing effluent limitation guidelines. After the SBM effluent limitations guidelines have been promulgated, EPA Region 4 may consider modification of the existing permit to incorporate the cuttings limitations of the guidelines.

Comment 26: The permit should be modified to specifically recognize the additional categories of drilling muds that have been defined by EPA, and to authorize their discharge. In the final Coastal Effluent Guidelines, EPA recognizes that additional categories of drilling fluid, specifically Synthetic Based Mud (SBM) and Enhanced Mineral Oil (EMO), are warranted due to the pollution prevention opportunities presented by these new technologies.

The commenter recommends that Region 4 participate in the task force to help expedite completion of this effort—in a time frame that will allow for inclusion of permit provisions in this general permit clearly defining the appropriate effluent limitations for these mud systems.

Response: EPA agrees with the commenter that synthetic based drilling fluids (SBMs) are a new drilling technology and in the Coastal Effluent Guidelines recognized the potential pollution prevention opportunities presented by this new technology (61 FR 66086). SBMs are most often used under difficult drilling condition such as deep wells where traditionally oil-based drilling fluids were used (Burke and Veil, 1995). In fact, SBMs were developed in response to the discharge ban of OBM in the North Sea in the early 1990s and not as a substitute for traditional water based drilling fluids, as the commenter states (EPA, 1996). Water-based drilling fluids are still the most cost effective drilling fluid type for most normal drilling situations.

The commenter is correct that SBMs are currently under investigation by the Engineering and Analysis Division of EPA Headquarters. The investigation is in support of a presumptive rule (i.e., expedited rule) for the development of effluent limitation guidelines for SBMs. EPA Region 4 disagrees with the commenters statements that the Region is not involved in the ELG process. The Region is both informed and participating in EPA's work group developing ELG for SBMs.

Comment 27: The commenter states that the permit should eliminate the acute toxicity limitation for produced water and require the chronic test for compliance instead. The commenter states that the chronic endpoint may be more appropriate due to the fact that produced water dilutes rapidly in the offshore environment.

Response: The Region believes that for compliance purposes of this 5-year permit, that the acute toxicity test meets the requirements of the Clean Water Act to prevent toxic discharges from facilities discharging produced water.

Comment 28: The commenter states that the "Agency should allow the use of diffusers, dilution or split discharges to achieve compliance with the produced water toxicity limitation."

Response: The Agency determines the produced water toxicity limitation based on a facility's site-specific water column conditions and discharge configuration. An operator can utilize any number of methods to increase the dilution of their discharge in configuring their effluent discharge. The

configuration chosen utilized will be used to model the facility-specific toxicity limitation. Commingling or diluting wastestreams prior to discharging effluent, however, cannot be used as a method to achieve NPDES permit compliance.

Comment 29: The commenter asks that the definition of "Areas of Biological Concern" be rewritten. It is very broad, without criteria that could help define the agency's intent. For example, it includes all "... features or functions that are potentially sensitive to discharges associated with the oil and gas industry." The MMS requirement for live bottom surveys specifies 200 meter line spacing (See MMS "Revised Guidelines for Photodocumentation Surveys," January 31, 1989). This suggests a minimum area of coverage of live bottom should be greater than 200 meters in at least one dimension. A value of 5% cover has been used as a minimum percent cover to classify an area as live bottom in various studies. The commenter recommends that EPA incorporate this kind of standard into the definition of "Areas of Biological Concern."

Response: EPA's definition of area of biological concern is found in Part IV.B.3. EPA regularly confers with MMS regarding such environmentally sensitive areas and will consider MMS policies and information in making determinations regarding Areas of Biological Concern (ABCs). ABCs are locations identified by MMS as "no activity" or "live bottom." "Live bottom" areas are defined as "areas in the eastern Gulf, having seafloors characterized by sparsely distributed rocky outcrops a few meters in relief . . . [which] contain biological assemblages consisting of sessile flora and fauna which tend to attract or accumulate turtles and fish; such areas are richer and more diverse and productive than the surrounding sea bottom and thus considered worthy of protection . . ." (USDOI, 1979). With respect to this general permit, Congress has given EPA responsibility for the determination regarding areas appropriate for the issuance of NPDES permits. While EPA will continue to work closely with MMS regarding activities covered by this general permit, EPA is responsible for designation of Areas of Biological Concern and regulation of discharges that may affect such areas. In this permit, EPA has specifically designated such areas and additional areas may be designated in the future.

Comment 30: The commenter asks that the 1,000 m prohibition on discharges near Areas of Biological

Concern be reconsidered. Produced water discharges dilute rapidly (100-fold within a few meters of discharge) and rate limitations and/or shunting could be used for drilling fluids in areas of concern.

Response: The Region is requiring that operators obtain individual permits for discharges in these areas so that appropriate limitations (e.g., rate limitations and/or shunting) can be determined on a case-by-case basis rather than determining all possible solutions for inclusions in this general permit.

Comment 31: The commenter suggests that a new category of miscellaneous discharges be added: "hydrotest and other treated water." The proposed definition is "seawater or freshwater which has been treated, typically to control fouling, corrosion, and scaling, before it is discharged. Included are effluent wastestreams such as:

(1) Excess seawater which permits the continuous operation of fire control and utility lift pumps;

(2) Excess seawater from pressure maintenance and secondary recovery projects;

(3) Water released during fire system tests and training, including AFFF (light-water systems);

(4) Seawater used to pressure test piping;

(5) Ballast/bilge water;

(6) Non-contact cooling water;

(7) Desalinization unit discharge.

The effluent would be limited by "no free oil" and include a footnote that states "Treatments to these waste streams (when discharge is planned) shall be made in accordance with product registration labeling, (for EPA-registered products), and manufacturers' maximum recommended dosages."

Response: While EPA does not disagree with the commenter, EPA received minimal information regarding this type of proposed miscellaneous discharge from the public on which to assess the appropriateness of including the proposed provision. Based upon this minimal information, and EPA's belief that not all permittees will necessarily seek authorization to make these types of discharges. Accordingly, discharges who anticipate the discharge of miscellaneous materials within the category of "hydrotest and other treated water" will be addressed on a case by case basis. If EPA determines in the future, based upon applications for NPDES permit coverage, that this category of miscellaneous discharges is necessary and appropriate for inclusion in the general permit, EPA will modify the permit to include such provision.

Comment 32: The permit should allow the use of the partial toxicity test to minimize cost and burden to the operator. The partial test allows for the test organisms to be exposed to only a single concentration, the permit limitation, to determine pass or fail of the limitation.

Response: EPA has specified testing methodology set forth in 58 FR 12507, which is defined in the applicable effluent guidelines at 40 CFR part 435. These provisions allow partial toxicity tests. See Appendix 2.

Comment 33: The commenter suggests that Region 4 adopt the same notification requirements as are in the Region 6 permit: "permittees who are located in lease blocks that are either in or adjacent to "no activity" areas or require live bottom surveys are required to submit both a notice of intent to be covered that specifies they are located in such a lease block. In addition they are required to submit a notice of commencement of operations. Permittees located in lease blocks either in or immediately adjacent to MMS defined "no activity" areas, shall be responsible for determining whether a controlled discharge rate is required."

Response: Based on new information, which is discussed in the Ocean Discharge Criteria Evaluation, and unique areas in the Eastern Gulf of Mexico, as indicated in the Final Environmental Impact Statement, Region 4 believes the current Notice of Intent (NOI) requirements are appropriate. The Region revised the NOI requirements to include additional information, specifically in the Central Planning Area.

Comment 34: The commenters request that the permit contain produced water toxicity limitations tables for various pipe configurations and flow rates.

Response: Because discharge rates change over the producing life of a well, Region 4 believes this approach allows the operators flexibility in complying with limitation. It also allows the use of diffusers should more mixing be required to meet the produced water limitation. Therefore, EPA will not add tables for compliance, but will allow the operator to calculate a limit based on flow and comply with that limit.

Comment 35: The language concerning non-operational facilities should be deleted from Part I.A.4 of the permit. The sentences are contradictory and an operator should not have to submit its exploration or development production plan for permit coverage.

Response: Non-Operational leases, which are leases on which a discharge has not taken place within 2 years prior to the effective date of the new general

permits will lose coverage under the previous existing general permit on the effective date of the new general permits. However, upon submittal of an exploration plan or development production plan to EPA, plus the required information in the Notice of Intent (NOI) these non-operational leases would be eligible for coverage under the new general permits and will be notified for inclusion of coverage from the Director of the Water Management Division. Regarding submittal of an exploration or development production plan, EPA included this submittal in an effort to determine the scope and geographic area of potential discharges. While the same type of information could be provided in many different forms, EPA determined that exploration and developmental plans are preexisting documents which are regularly prepared by potential permittees that contain the necessary information for EPA to make permit coverage decisions, and their submittal for permit coverage would avoid the need to create additional paperwork and burden to obtain coverage. The commenter provides no persuasive reason for EPA to deviate from the proposal to submit exploration and development plans for permit coverage.

Comment 36: EPA should eliminate the requirements to submit a Notice to Drill (NTD) and Notice of Commencement of Operations (NCO). This is another instance of EPA proposing permitting notification requirements which create unnecessary burdens on the operator. EPA has not provided a rationale for the increased burden of making these notifications, except in areas of special significance, and the operator is placed in a position of non-compliance or interruption of operation if notifications are missed.

Response: In response to the commentors concern about NCO requirements concerning accurately measuring produced water, Region 4 did revise the submittal timeframes of the NCO notices. The NTD and NCO are necessary for EPA to carry out statutory authorities regarding discharges to the Gulf of Mexico and are substantially similar to the requirements of other EPA Regions. The information is required so that EPA is aware of the location of discharges or potential discharges, even though they may be temporary, for the purpose of ensuring compliance with permit provisions, including inspection. The notices provide information necessary for the Agency to make determinations regarding the impact of discharges to the environment. The required notices provide EPA with basic

information necessary to effective regulation of discharges, including information necessary for calculation of toxicity limitations for produced water discharges. EPA would like to emphasize that the submittal of these notifications consists of simply sending a form to the Region containing information which should be readily available to the permittee well before the time the notices are required to be sent to EPA. EPA does not consider these submittals a significant "burden."

Comment 37: The commenter points out that the permit establishes a discharge rate limitation for drilling fluids in the units of bbl/hr but requires reporting as average daily discharge rate in bbl/day. In addition, the discharge rate limitation should not apply before installation of the marine riser because these discharges cannot be accurately estimated.

Response: The Region revised the once/day reporting frequency to once/hr to be consistent with the limitation requirement and has included an exception to the discharge rate limitation that excludes discharges at the seafloor before installation of the marine riser in Part I, Section B.1(c) of the permit.

Comment 38: The commenter recommends that the parenthetical information, "* * * (this includes any spill that requires reporting to the state regulatory authority) * * *," be deleted from the requirement to report noncompliances which may endanger health or the environment. A "spill" subject to Section 311 of the Clean Water Act is not considered to be a noncompliance with the terms of the NPDES discharge permit, but rather is subject to Coast Guard jurisdiction. Also, the permit applies only to areas far removed from any State jurisdiction, so it would be unreasonable to assume that a noncompliance situation would impact a State.

Response: EPA disagrees with the commenter. Any discharge is required to be reported as set forth in the permit. The commenter is incorrect with respect to jurisdiction over oil spills pursuant to Section 311 of the CWA, which is enforceable by the Administrator.

Comment 39: The commenter states that EPA should change the requirement to submit DMRs on a facility basis. Instead, such reporting should be averaged for each lease block.

Response: EPA does not agree with the commenter that a change to the requirement of DMR submittal on a facility basis is needed. EPA considers each facility as a point source, (in fact, one facility commonly has several point sources of pollution, based on the waste

streams that are discharged). EPA sees no compelling rationale for aggregating discharges for the purposes of averaging activities within a lease block. Unlike in the Western Gulf of Mexico, the Eastern Gulf has few facilities per lease block. EPA does not find any benefit in consolidating the reports from different facilities within the permit coverage area or any burden to permittees under the approach set forth herein.

Comment 40: The commenter suggests that EPA should change the proposed DMR reporting requirement from a monthly to an annual requirement.

Response: The commenter is correct that EPA has the right to enter a facility at any time and inspect its monitoring reports. However, since monitoring data is compiled on a monthly basis, EPA does not consider it a burden for industry to submit the compiled information and considers this submission as an important record of recent data. Such information is crucial to EPA enforcement and compliance efforts.

Comment 41: The commenter requests that the Agency delete the requirement to submit a copy of laboratory reports with the DMR.

Response: EPA disagrees with the commenter regarding deletion of the requirement to submit a copy of laboratory reports with the DMR. EPA considers the laboratory reports important and pertinent discharge monitoring information. EPA does not believe that the photocopying of the lab reports, and their inclusion in the operator's DMR package, represents a significant additional burden, and these reports provide a great deal of information to EPA.

Comment 42: The commenter states that EPA should remove the requirement to notify the Regional Director upon cessation of discharge or modify the wording to read: "If, during the term of this permit, the facility permanently ceases discharge to surface waters, the Regional Director shall be notified within 60 days."

Response: EPA agrees with the commenter's suggested wording for the permit regarding the notification of the Regional Director upon cessation of discharge. EPA has revised the language of the permit accordingly.

Comment 43: To the definition of Daily Maximum Discharge Limitation, the commenter asks that EPA insert the word "daily" between "allowable" and "discharge rate or concentration, such that it would now read: "Daily Maximum discharge limitations are the highest allowable daily discharge rate or concentration measured during a calendar day."

Response: EPA agrees with the comment regarding the definition of Daily Maximum Discharge Limitation. EPA has changed the language in the permit accordingly.

Comment 44: The commenter asks that EPA define Diesel Oil as "distillate fuel oil, as specified in the ASTM Specification D975-81, that is typically used as the continuous phase in conventional oil-based drilling fluids."

Response: EPA agrees with the commenter that clarification by identifying ASTM Specification D975-81 is appropriate. The general permit prohibits discharge of Diesel Oil, as defined, including Diesel Oil (and other oils) which may contain toxic pollutants as contaminants not otherwise identified as a constituent of ASTM D975-81. The definition will be amended to include the commenter's suggested language and to ensure consistency with offshore effluent guidelines (58 FR 12454; 40 CFR Part 435).

Comment 45: The commenter asks that EPA use the definition of Drilling Fluids in the current effluent guidelines (FR 61, page 66124).

Response: EPA agrees with the commenter and has changed the definition of drilling fluids. The current definition in the permit is the same as that used in the coastal effluent guidelines (61 FR 66086) and includes the four classes of drilling fluids: water-based, oil-based, enhanced mineral oil, and synthetic-based. As stated above, the discharge of oil-based and synthetic based fluids are not authorized by the general permit.

Comment 46: The commenter states that EPA should delete the definition of "Free Oil" or reword it to clarify that it is a test result obtained by the test method specified in the permit for the particular effluent stream.

Response: EPA agrees with the commenter and has changed the definition of free oil. The definition in the permit is the same as that used in the offshore effluent guidelines (58 FR 12454).

Comment 47: The commenter asks that EPA change the definition of Garbage such that it would read as it does in the Region 6 offshore permit: "means all kinds of food waste, wastes generated in living areas on the facility, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the facility and liable to be disposed of continuously or periodically, except dishwasher, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78."

Response: EPA has reviewed the definition of garbage found in the Region 6 general permit (GMG290000). Region 4 agrees with the commenter to the extent that the definition does not exclude components of domestic waste from effluent limitation and monitoring requirements set forth in Part I., Section A of the general permits. The definition of domestic waste in the general permits will continue to include discharges from galleys, sinks, showers, safety showers, eye wash stations, fish cleaning stations, and laundries. EPA has modified the definition in the general permit so that it is the same as that found in GMG290000 (61 FR 41609).

Comment 48: The commenter requests that the reference to an MMS Environmental Impact Statement in the definition of No Activity Zones (Part IV,B,38) be deleted. The commenter stated that by referencing a specific lease sale EIS, the proposed definition would be outdated by subsequent lease sales. The MMS lease stipulation is the formal mechanism for that agency to specify No Activity Zones. MMS procedures will not permit or allow a rig or structure to be installed in a No Activity Zone stipulated in the lease agreement.

Response: EPA agrees with the commenter that MMS lease stipulations are the formal mechanism for that agency to specify No Activity Zones. However, EPA does not agree that the proposed permit's definition of No Activity Zones needs to be changed to delete the reference to an MMS Environmental Impact Statement. The definition would not be outdated by subsequent lease sales because it contains the contingent clause that, "additional no activity zones may be identified by MMS during the life of this permit."

Comment 49: The commenter requests that the final sentence dealing with states and the territorial seas in the definition of No Activity Zones (Part IV,B,38) be deleted.

Response: EPA does not agree with the commenter that the reference to Alabama, Mississippi, and Florida territorial waters within the definition of No Activity Zones should be deleted. EPA has determined that if these states identify no activity zones within their territorial waters, it may affect the discharge scenarios of the facilities located close to the boundary between federal and state waters. In fact, there are several facilities that are currently in located close to the Alabama state territorial waters.

Comment 50: The commenter requests that EPA delete the definition of No

Discharge Areas (Part IV,B,39) within the permit.

Response: EPA disagrees with the commenter and has kept the definition of No Discharge Areas within the permit, since EPA has authority under the CWA to prohibit pollutant discharges to surface waters for specified areas. When EPA determines a discharge is not allowable because of proximity to an Area of Biological Concern, a "no discharge area" is affectively defined.

Comment 51: The commenter requested that the definition of Non-Operational Leases (Part IV,B,40) would be deleted or revised. The commenter's rationale for the deletion is that leases that are covered by the existing (1986) general permit should continue to be covered by the 1986 permit until they receive final permit coverage under a replacement permit. There will be no need for a non-operational classification.

Response: EPA does not agree with the commenter's rationale that leases covered by the existing (1986) general permit should continue to be covered by the 1986 permit until final permit coverage is received. In the proposed permit, EPA states that leases from which discharges did not occur two years prior to the effective date of the new general permit are considered Non-Operational Leases. EPA believes that a two year period of time during which no discharge has taken place is a reasonable temporal delineation for permit coverage. Furthermore, environmental impacts from discharging facilities are likely to differ substantially from non-discharging operations. Accordingly, EPA is updating the notification requirements and reevaluate the permits of those leases that have not discharged 2 years prior to the effective date of the new general permit. This approach is also consistent with the procedures that must be followed for new leases, or new dischargers. Another reason this approach is reasonable and necessary is some permittees had applied for and received general permit coverage many years ago without having conducted any exploration or production activities.

In addition, according to the NPDES Program (40 CFR § 122.6) the existing general permit is in force until the effective date of the new permit. Therefore, coverage under the existing permit expires the effective date of the new permit, except for Operational Leases which shall be administratively continued under the previous permit until coverage is granted under the reissued OCS general permit by Region 4 to permittees who comply with the

requirements to obtain general permit coverage.

Comment 52: The commenter requested that the definition of Operating Facilities (Part IV,B,41) would be deleted or revised. The commenter's rationale for the deletion is that leases that are covered by the existing (1986) general permit should continue to be covered by the 1986 permit until they receive final permit coverage under a replacement permit, regardless of whether discharges have occurred. If this recommendation is adopted, there will be no need for a definition of Operating Facilities.

Response: EPA does not agree with the commenter's rationale that leases covered by the existing (1986) general permit should continue to be covered by the 1986 permit until final permit coverage is received. In the proposed permit, EPA states that leases from which discharges have occurred two years prior to the effective date of the new general permit are considered Operational Leases. EPA has intended to update the notification requirements and to reevaluate the permits of those leases that have not discharged greater than 2 years prior to the effective date of the new general permit.

In addition, according to the NPDES Program (40 CFR § 122.6) the existing general permit is in force until the effective date of the new permit. Therefore, coverage under the existing permit expires the effective date of the new permit, except for Operational Leases, which shall be administratively continued under the previous permit until coverage by Region 4 is granted under the reissued general permit to permittees who comply with the requirements to obtain general permit coverage.

Comment 53: The commenter states that the definition of Uncontaminated Ballast/Bilge Water (Part IV,B,53), should be changed to be consistent with the Region 6 permit definition which reads: "means seawater added or removed to maintain proper draft."

Response: EPA has determined that the commenter's requested amendment is appropriate and Region 4 agrees with the recommended definition change and has revised it in the final permit

Comment 54: The commenter asks that a new definition be added for Uncontaminated Freshwater: "freshwater which is discharged without the addition of chemicals; examples include: (1) discharges of excess freshwater that permit the continuous operation of fire control and utility lift pumps, (2) excess freshwater from pressure maintenance and secondary recovery projects, (3) water

released during fire protection tests and training, and (4) water used to pressure test piping.”

Response: The Region included this wastestream with a limitation in the fact sheet under minor waste streams and inadvertently left it out of the permit conditions. These wastestreams will be included in the final permit along with definitions from the offshore Effluent Guidelines and will be mentioned in the Ocean Discharge Criteria Evaluation.

Comment 55: The commenter suggests that the permit should cover all facilities located in the offshore subcategory and discharging to the federal waters. Any prohibition against discharges to the federal waters from facilities located in the territorial seas should be deleted.

Response: This discharges of drilling muds, drill cuttings in territorial seas are controlled by State's administering their own NPDES programs. The State's guidelines are often more stringent than applicable Federal criteria, therefore, movement of a discharge from territorial seas into Federal Waters should not be an option for complying with more stringent State Criteria, developed by each State's NPDES program. Region 4 believes that since their would possibly be a low percentage of territorial facilities discharging to Federal Waters, these facilities would be properly handled on a case-by-case approach through individual permits and are prohibited under Region 4's final general permit issued today.

Comment 56: The commenter believes that the first paragraph in Part I.A.2, should be deleted. Alternatively, it should be reworded as follows: "Discharges within 1000 meters of an area of biological concern are not eligible for coverage." According to the commenter, EPA's proposed language would—in the event an operator merely sought authorization to discharge within 1000 meters of an area of biological concern—deny coverage under the permit to the operator, instead of just to the area in question. Though it may not have been EPA's intent, this language could be interpreted to deny coverage to an operator for the entire general permit area, not just for areas within the 1000 meter buffer zone. This would be totally unjustified. The commenter raises similar issues with respect to the 26 parallel currently under moratorium.

Response: The comment represents an unreasonable interpretation of the general permit provisions. The general permit language clearly prohibits discharges within 1000 meters of an Area of Biological Concern and operations below the 26 parallel, and excludes from general permit coverage

operations of any operator who seeks to discharge drilling fluid within the 1000 meter buffer zone and below the 26 parallel. The language should be read in context of the section in which the language is placed.

Comment 57: The commenter requested that the sentence "Wastes must be hauled to shore for treatment and disposal" in Section I.B.5 of the draft permit would be deleted. Although the permit may establish a zero discharge limitation for produced sand, it should not specify treatment and disposal options. Other options may be available to allow an operator to meet the zero discharge limitation. The commenter identified no other method of treatment and disposal.

Response: EPA is unaware of methods of disposal of produced sand which would be in compliance with the terms of the general permits but would not involve the hauling of wastes to shore for treatment and disposal. The discharge of produced sand is prohibited under the general permits. The commenter has not provided EPA with any identification of the "other options [which] may be available to allow an operator to meet the zero discharge limitation." EPA cannot at this time assess such options and make the determination necessary to entertain the requested language changes.

Comment 58: The commenter requested that in section I.B.10 of the draft permit, uncontaminated freshwater and excess cement slurry would be added to the list of miscellaneous discharges.

Response: The Region included these wastestreams with a limitation in the fact sheet under minor waste streams and inadvertently left it out of the permit conditions. These wastestreams will be included in the final permit along with definition of uncontaminated freshwater from the offshore Effluent Guidelines.

Comment 59: In Section I.B.10(a) of the draft permit, monitoring of miscellaneous discharges for free oil should be required only when discharging and the facility is manned. Also in this section, the permit requires that static sheen testing be performed when visual observation of a sheen is not possible. The permit should also include the statement "Static sheen testing is not required for discharges at the sea floor."

Response: The Region concurs with the commentor and has revised Section I.B.10(a) of the permit.

Comment 60: Section I.B.10(a) of the draft permit requires that the static sheen test be used to determine the presence of free oil in miscellaneous discharges when visual observation of a

sheen is not possible. The commenter states that the "permit should also include the statement 'Static sheen testing is not required for discharges at the sea floor.'"

Response: The Region concurs and has included revised language in the permit Section I.B.10(a).

Comment 61: The commenter suggests that in Table 3 of the permit, under Miscellaneous Discharges, "Muds, Cuttings & Cement at the Sea floor" should be listed separately from "Uncontaminated Ballast/Bilge Water."

Response: EPA agrees with the commenter's editorial comment and has made the corresponding revision of Table 3 in the permit. These are separate wastestreams.

Comment 62: The commenter recommends that the existing end of well sample definition be retained instead of the proposed change to require the sample to be taken within 48 hours prior to discharge. The change would require operators to discharge without toxicity test results.

Response: Region 4 concurs with the commentors rationale and will retain the current definition as proposed. The definition will remain unchanged from the previous NPDES general permit.

Comment 63: According to the commenter, within the Draft Environmental Impact Statement (DEIS), EPA admits that discharges from rigs and production platforms have the potential to damage or destroy fish eggs, larvae, and juvenile fish. Nevertheless, EPA's proposed general permits will merely require "the dilution of discharges to reduce the levels of toxics" to avoid unreasonable degradation. Species that feed on benthic organisms may be subject to pollutant bioaccumulation. Dilution of toxic discharges will not eliminate the potential for bioaccumulation. Thus, dilution is not the solution to the problems posed by these discharges, and will not sufficiently protect the vital resources of the Gulf of Mexico.

Response: EPA agrees that dilution is not an appropriate method for treating discharges. EPA disagrees with the commenter's statement that the general permit only requires "the dilution of discharges to reduce the level of toxics" to avoid unreasonable degradation.

The conditions and limitations in the general permit for the eastern Gulf were determined to protect water quality and preserve the health of benthic and other marine organisms. These permit conditions and limitations include no discharge of free oil, no discharge of oil-based muds, no discharge of diesel oil, no discharge of produced sand, no discharge within 1,000 meters of areas

of biological concern, oil and grease limitation on produced water, cadmium and mercury concentration limitation in barite, discharge rate limitations around live-bottom areas, and limitations on the whole effluent toxicity of both drilling fluids and produced water.

The NPDES permits also require water quality-based analyses, and for marine dischargers, must include a Clean Water Act (CWA) Section 403 "Ocean Discharge Criteria Evaluation" (ODCE). The ODCE is a document published by EPA to evaluate the environmental impact of the NPDES general permit of discharges from the offshore oil and gas industry. The ODCE determined that the conditions and limitations in the general permit protected the water quality of the eastern Gulf of Mexico and preserved the health of the aquatic life.

Comment 64: Commentor disappointed that EPA did not consider Gulf Coast Environmental defense previous suggestions: 1) No drilling landward of the 200meter isobath, or 100 miles from shore, whichever is greater.

All wells in the Gulf of Mexico should be zero discharge. The Gulf of Mexico not an infinite resource and we can't continue dumping wastes into the water & expect it to be healthy.

Response: EPA considered these comments and provided a response to this concern on Pages 5-25 and 5-26 of the Final Environmental Impact Statement which was available for a 30 day public comment and review period starting on August 14, 1998 thru September 14, 1998. Additional response to this comment is provided throughout the responses herein regarding the scope of general permit coverage.

Comment 65: Commenter questions at what point does damage become irreversible, referring to report of Elliot Norse, a marine ecologist founder of the Marine Conservation Biology Institute in Redmond, Washington declaring that the sea is in real trouble for a variety of reasons, including the effect of oil and gas exploration and production activities as governed by the CWA and Endangered Species Act. Commenter also stated that EPA should eliminate drilling from near shores areas completely, and do not allow any discharges into the Gulf of Mexico.

Response: EPA provided a more comprehensive response and analysis of the commenters concerns in the EIS, agreeing with the comment that the world's oceans are facing problems as a result of human activities. EPA believes, however, that the discharges that result from oil and gas exploration and

development activities can be successfully managed to prevent any significant environmental harm and that no irreparable harm will occur as a result. EPA is aware of the commentor's concern and discusses impacts to existing or potential recreational fisheries or commercial fisheries in the EIS and ODCE. EPA has no authority to regulate fisheries or the use of artificial reefs in state and federal waters nor does EPA have authority to prohibit the development of oil and gas resources. Section 402 of the Clean Water Act provides EPA with the authority to regulate discharges that result from such activities. Both the Final Environmental Impact Statement and Ocean Discharge Criteria Evaluation documents are available as part of the Region's administrative record and will be made available upon request.

Comment 66: Requested EPA to extend deadline for comments on its draft NPDES general permit concerning offshore drilling activities, since they have just been notified and need more time to prepare comments.

Response: EPA notified all hearing participants and persons who provided input during the public hearings, and believes the 45 day comment period on the revised NPDES general permit was sufficient to provide adequate response. EPA notes that this commentor did provide written comment to these permits and EPA's response is included herein.

Comment 67: U.S. Department of Energy made comments on EPA revisions supporting extending coverage of General Permit into the Central Planning Area and previous comments that focused on 4 areas: (1) Exclusion of facilities located in less than 200 meters of water depth from coverage under the General Permit. (2) Produced Water Toxicity requirements. (3) Synthetic-based and enhanced mineral oil-based drilling fluids. (4) Oil Content testing requirement.

Response: Previous comment responses respond to these issues, as well as analysis in the EIS and ODCE. After receiving initial comments on the Regions Alternative B, which proposed general permits seaward of the 200-meter isobath for the entire Eastern Gulf of Mexico and reviewing additional information, the Region decided to revise the permitting strategy for the Central Planning Area, and selected Alternative A with certain exclusions based on unique features in the area of offshore Mississippi and Alabama. The Region elected to maintain Alternative B for the Eastern Planning Area which proposed general permits seaward of the

200-meter isobath which is noted in Final Environmental Impact Statement.

EPA believes that the Eastern Planning area is relatively unexplored for the purpose of oil and gas activities and that the probability of encounter with areas of biological concern is greater in the Eastern Planning Area. The EPA believes that individual permitting in water depths of less than 200 meters will provide the agency with the information needed to detect and adequately protect sensitive marine habitat.

Comment 68:

Chevron mentioned that EPA has not considered previous comments, and careful consideration should be given to March 1997 comments and comments submitted by the OOC in February 1998.

Response:

EPA considered all comments and responds in writing at this time, the time of final issuance which is appropriate. While the revised general permits did propose revisions consistent with this and other commentor's concerns, EPA did not respond in writing at that time as EPA is responding herein after all comments to the permit and EIS have been submitted and analyzed.

Comment 69: Delete permit requirement to submit photo documentation for every facility in 100 meters or less in the Central Planning Area. Stated photo documentation should only be required on new facilities where an analysis of geohazards survey data suggest that significant hard bottoms may be present. Data in area suggests that very few facilities will be near significant hard bottom areas. Mentioned that for facilities already discharging this requirement provides no benefit, since EPA has determined that the discharge is acceptable.

Response: EPA will require photo-documentation survey information to be submitted with all notices of intents (NOI) for coverage under the general permit for existing source and new source discharges in less than 100 meters (water depth). The EPA believes that the photo-documentation in the Central Planning Area (CPA) will provide the level of information to the agency necessary to make determinations for permit covered as required by law and are consistent with MMS requirements in the Eastern Planning Area. The EPA does not agree that adequate site-specific information exists in the Central Planning Area to assure that all types of potentially sensitive habitat have been identified.

EPA does not limit it's concern with the protection of living marine resources

only to those communities that may be identified as "significant hard bottom areas". The EPA agrees that seafloor imaging provided by the geohazard survey may detect high relief (hard bottom) habitat, depending on how the survey was conducted. The data collected during such surveys do not allow for the detection of biota (plants and animals) that may comprise high-relief hard bottom community assemblages and would provide no evidence of any communities not associated with high relief benthic structure.

The EPA concurs with the commentators concerns regarding the need for photo-documentation for continuing discharges of either existing source or new source categories that were covered under the previous permit (no photo-documentation requirement) and has modified the NOI requirement in the final permit to reflect these concerns. The Region agrees that currently active discharges were permitted under a previous permit without a photo-documentation requirement. The Region further agrees that photo-documentation of the seafloor around currently active discharges will not provide additional protection to the environment. The Region has provided an exception to the photo-documentation requirement for submission of the NOI for new and existing source discharges permitted under the previous permit, which are currently active on the effective date of the new general permit. The exception is limited only to the currently active discharges, for the life of those discharges. The modification to the photo-documentation requirement does not exempt the platform or rig from which the discharge originates nor does it exempt the geographic area around the discharge point from any new discharge which occurs after the effective date of the general permit.

Comment 70: API commented on the EPA revised Oil & Gas Permit and mentioned that EPA has not gone far enough in expanding coverage under this permit since it excludes a significant percentage of the Gulf. Stated that the issuance of this permit will force many operators to go through the time consuming and burdensome process of obtaining individual permits and does not believe EPA has provided a rationale for restricting coverage of general permits in this manner. Stated that the OOC has submitted detailed comments on various aspects of the revised draft permit.

Response: EPA considered all comments in the formulation of a final determination on the final NPDES

General permit for the Eastern Gulf of Mexico. EPA has examined the available literature on the distribution of important benthic communities, fisheries habitats, and marine mammal habitats and has found that the areas over the continental shelf and shelf transitional zone (approximated by the area out to the 200 meter isobath) contain an abundance of sensitive biological resources, particularly in the Eastern Planning Area and in the Excluded features identified in the Central Planning Area. Consistent with the literature review noted above, EPA concludes that due to the abundance and sensitivity of the biological resources in the area offshore Florida Alabama Eastern Planning Area and features identified in the Offshore Central Planning Area, extra protection can be afforded by the thorough, case-by-case review possible with individual permits in these areas and considers this to be the more reasonable approach based on current information.

Comment 71: Commentor stated that the draft NPDES permit rescinds a general permit which was in effect in the area of the Gulf under Region 4's jurisdiction for years with no demonstrated adverse effect, and fails to follow executive orders and VP Gore's Reinvention of Government program designed to make government less complicated. Stated that Region 4 has failed to follow Congress's direct instructions that it abandon its emphasis on requiring individual permits for each OCS oil and gas project and propose an NPDES general permitting regime which is substantially the same as that used since 1986 by both EPA Regions 4 and 6, which has been successful on regulating OCS oil and gas operations in the Gulf of Mexico. Stated that Region 6 has the most experience in dealing with a high level of OCS oil and gas activity, with true biological sensitive areas and with results of scientific studies looking for potential adverse impacts on the marine environment over the years. Stated that there were no problems under the general permit previously administered by Region 4 and there would be none if the old general permit was renewed or Region 6 general permit adopted.

Response: At the time of issuance of a permit, EPA considers all data and information as required by the various applicable statutes and regulations, including, *inter alia*, the CWA, NEPA, ESA, and, as the commenter points out, executive orders, public comment, and other applicable guidance from the Executive, Legislative and Judicial branches of government. All of this information is not static, is subject to

change, and has in fact changed since Region 4's issuance in 1986 of the previous general permit covering these activities. Many of comment responses above explain the current status of data and information and full data and information is provided in the administrative record.

The level of exploration and development activity for the areas in Region 4's jurisdiction has increased since the issuance of the previous general permit in 1986. Determinations regarding these general permits is based upon updated projections for oil and gas exploration and development activities for the duration of this permit, based primarily upon MMS' estimated OCS Development Scenario, (see also EIS at Section 1.4.1.; Table 2-7), and MMS' planned lease sales for the Gulf of Mexico area under Region 4's jurisdiction. These projections provide, in summary, that the majority of activity will continue to take place within the Central Planning Area. While a portion of the Eastern Planning Area will be offered for lease sale, projections indicate that a relatively low number of blocks offered for lease sale are expected to be purchased and require NPDES permits, based upon historical trends and MMS projections. Accordingly, EPA's determination regarding the scope of general permit coverage is supported by exploration and development activity projections, as well as the analysis of potentially sensitive biological resources, statutory, and legal requirements set forth in response to previous comments.

The commenter is incorrect regarding Region 4's oil and gas permitting activities. Region 4 has in fact for the last seven (7) years issued streamlined individual permits on exploratory drilling and production activity on new leases acquired in lease sales, since expiration of the former general permit expired in July 1991. The Region has required new leases to obtain individual permits and has conducted expeditious permitting reviews on each proposed activity and considers this to be environmentally sound inside 200 meters. This is an effective, streamlined way to deal with the increased level of activity that has been experienced in this area, while providing optimal environmental protection and is consistent with the approach being taken in these general permits issued today. Based upon these seven years experience, Region 4's expedited individual permit review processes, and the projections for actual exploration and development activity in the Eastern Planning Area, EPA believes that the

commenter will experience no burdensome.

Following concerns expressed in language inserted into the United States House of Representative's Appropriations Committee (July 11, 1997), and Senate/House Conference Report (Oct. 6, 1997), Region 4 reviewed the concerns raised and on Jan 7, 1998, Region 4 issued a revised draft general permit which EPA believes addresses the concerns raised in those reports and complies with statutory and other legal requirements. The revised permit incorporates general permit procedures, terms and conditions which are substantially similar and in some cases identical to those found in the Region 6 general permit. In addition, the individual permit issuance process which will apply to those areas outside the general permit coverage have been streamlined so as to avoid unnecessary cost and delay.

With respect to the commenter's concern that the border between the Central and Eastern Planning Areas as the demarcation for general permit coverage is political and not scientific, the border between these areas was established by DOI and has long been used for lease sales. The border is not, as the commenter states, a political border between Alabama and Florida but actually is a distance West of the Alabama and Florida line. It should be noted that MMS also recognizes the distinction between the areas and has instituted additional requirements for leases in the Eastern Planning Area for the purpose of environmental protection, using the same border for demarcation. Because MMS uses this border for lease sales, resulting in the historical and projected level of activity between these two areas differing substantially, and scientific information available between the two areas differing substantially, the border is also an appropriate border for general permit coverage.

Comment 72: OOC stated that photodocumentation surveys should not be required prior to, but only after that data from the geohazards survey has been interpreted, and that for one of the areas designated as areas of biological concern, the Pinnacle Trend, this area is also recognized by the MMS as a habitat that should be protected by lease stipulation and that Region 4's designation of the area as an Area of Biological Concern conflicts with protective measures of EPA Region 6 and MMS. Regarding other Areas of Biological Concern, the commenter stated that these areas (Southeast Banks, Southwest Rocks and 17 Fathom Hole) are common on the inner and middle

shelf off South Carolina, as well as Central Western and Louisiana, suggesting that the invertebrates seen here have a wide tolerance of fluctuating environmental conditions such as temperature and turbidity. Further, the commenter claims these assemblages of organisms are the same as those seen growing on petroleum platforms in similar water depths and are not sufficiently unique or so ecologically sensitive that they require special protection from oil and gas operations. The commenter believes that designating these areas as Areas of Biological Concern is inconsistent with both the policies of both MMS and EPA Region 4, by designating these areas as areas of biological concern.

Response: The Region notes that the commentator is aware that these unique features exist in the Eastern Gulf of Mexico. NPDES General Permits for the Eastern Gulf of Mexico provides reasonable assurances that these unique areas identified will be protected for the duration of the 5-year permit. EPA believes it is most expeditious for the industry to provide EPA adequate survey information up front for before granting coverage under the general permit. The term "live bottom" is confused with high relief hardbottom habitat. EPA is concerned with the protection of any living marine communities regardless of the geomorphology of the benthos. The data provided by the geohazard survey may detect high relief habitat if the sidescan sonar was set to obtain the highest possible resolution, depending on how the survey was conducted. It cannot detect communities not associated with relatively high relief benthic structure. Sub-bottom profiling will do neither. Regarding comments about communities on the Southeast Banks, Southwest Rocks and 17 Fathom Hole: all communities are variable over different space and time scales due to natural environmental factors. These facts do not preclude their protection from anthropogenic impacts. Biological productivity is only one of many community characteristics to be considered when making a judgement regarding its value and the level of protection afforded to it.

Comment 73: Stated that General Permit would prohibit discharges of drilling fluids within 1000-meters of areas of biological concern. Mentioned MMS lease stipulations have prevented drilling muds from reaching ABC's, and consequently there are very few studies that have investigated the effects of drilling muds and cuttings discharges on live bottom within 1000 meters. Stated in Destin Dome 57, investigators

found that shunted drilling discharges 480 meters from a high relief feature, did reach the hard bottom feature, but that there was no measurable effect of the discharges on the epibiota.

A prohibition of cuttings and produced water discharges within 1000 meters is not justified.

Mentioned studies and numerous studies including produced water bioaccumulation study.

Response: Based on the Region's information concerning drilling muds, cuttings, and produced water discharges the no discharge of these wastestreams within 1000 meters of an ABC is justified. As the commentator mentioned, shunted discharges based on data reviewed did not reach certain ABC's that were closer than 1000 meters. However, the general permit must provide adequate protection based on current environmental data for these discharges. Discharges that must be shunted based on data that reveals potential hard bottoms closer than 1000 meters, may also require individual permits and require site specific monitoring programs designed to address impacts related to that discharge based on communities involved, the frequency and volumes of discharges plus prevailing oceanographic conditions at the time of discharge, since shunting may only be a temporary mitigative alternative and not consider long term impacts. The singular case of the Destin Dome Block 57 project cannot lead to the conclusion that no impacts can occur as a result of drilling discharges within 1000 meters.

Comment 74: Workover and abandonment operations should be added to the listing of operations covered.

Response: The Region has added this category of operations, since workover fluids are used in this category and allowed to be discharged under the general permit.

Comment 75: Stated that a provision to the permit should be added requiring permittees to inform all contractors of the discharge limitations of their permit. Particularly important in the case of individual permits where discharge limitations may be imposed more stringent than those of the General permit.

Response: The operator is liable and responsible that the information on monitoring requirements, limitations and conditions comply with the general permit.

Comment 76: Stated that EPA should change its proposed identification system and use API's and MMS coding system. Stated that MMS will be analyzing DMR's as part of its initiatives

to meet the requirements of Government and Performance Results Act and to take full advantage of the DMR information submitted to EPA, we ask that operators link discharge information to discharge locations by using API and MMS codes.

Response: The current structure of EPA data fields does not allow the Region the flexibility to implement the American Petroleum Institute/Minerals Management Service numbers and currently are not amenable to change.

Comment 77: Stated that they disagree with the newly proposed site-specific photodocumentation surveys for the Central Planning Area, since enough information exists on areas of biological concern the CPA to make a pre-determination of their location without requiring the applicant to conduct the surveys and would lead to increased operator costs without significant benefit. Clarify issue of synthetic mud use as it applies to the definitions of Drilling Fluids and Drill Cuttings and address whether drilling muds and drilling cuttings discharged at the seafloor in substantial quantities using riserless drilling would be included in the definition of Muds, Cuttings and Cement at the seafloor.

Response: The EPA does not agree that adequate site-specific information exists in the Central Planning Area (CPA) to assure that all types of potentially sensitive habitat have been identified. The EPA believes that the proposed photodocumentation requirement in the CPA will provide that same level of information to the agency made available to it in the Eastern Planning Area where photodocumentation is mandated by the MMS. The Region has clarified the synthetic mud issue in response to comments. While synthetic muds are included under the revised definition of drilling fluids and can be used if needed in drilling operations, these synthetic fluids cannot be discharged. The Region also believes the current definition of Muds, Cuttings and Cement at the seafloor is adequate as proposed and will not be revised.

Comment 78: EPA should select Alternative A (general permits for the entire Eastern Gulf OCS) because: (1) most, if not all, operations are located shoreward of the 200-meter isobath and would thus be burdened with individual permitting which is cumbersome, uncertain, and causes costly delays; (2) the MMS program already offers adequate protections to Gulf resources; (3) EPA has not proven that general permits could not be adequately protective of Gulf resources, and in fact the ODCE has determined that the discharges will not cause

unreasonable degradation of the marine environment; (4) EPA could simply design alternative, more restrictive general permit limits and requirements for areas requiring special protection.

Response: EPA has carefully considered the comments of MMS and several industry commenters regarding applying (Alternative A) general permit coverage for the entire Region 4 jurisdiction. EPA has decided to extend General Permit coverage to its jurisdictional portion of the MMS Central Planning Area, with the exclusion of the 11 lease blocks subject to the MMS Pinnacles Stipulation and three other natural structural bottom features. Please refer to EIS Figure 3-2 for the location of these features. Section 2.4 of the Final EIS and the permit Fact Sheet contain complete descriptions of the permitting strategy.

EPA is comfortable extending General Permit coverage to the MMS Central Planning Area for several reasons. First, the Central Planning Area has been extensively surveyed for the locations of numerous (past and present) drilling and production sites, and few features that EPA would define as Areas of Biological Concern have been documented. Second, scientific survey literature of the Mississippi-Alabama shelf notes the general lack of firm bottom substrate for attachment of bottom life, high water column turbidity in much of the east-central inner shelf, and a trend of increased water clarity and light penetration eastward (Vittor 1985). The area is not normally under the influence of the sub-tropical Loop Current that elsewhere stabilizes water temperatures more suitable to increased epifaunal diversity. It has also been documented that the bottom area offshore Mississippi-Alabama experiences substantial deposition of fine particle sediments emanating from coastal rivers (Rabalais and Boesch 1987) that would tend to cover previously exposed hard substrate. Third, those features that the Region is now defining as Areas of Biological Concern are pronounced in terms of topography and are fairly well discernable by survey. Brooks and Giammona (1991) found predominately soft sediments punctuated in some areas with rock outcrops and topographic (the pinnacle trend) high features. EPA Region 4 believes that the condition requiring applicants seeking General Permit coverage to provide photo documentation and geohazards surveys will allow the agency to clear specific project sites for General Permit coverage fairly quickly, because EPA will require the same survey procedures as specified by MMS. The photo documentation

survey procedures are found in the MMS "Revised Guidelines for Photo documentation Surveys" dated January 31, 1989; the geohazards survey requirement is in the MMS Notice to Lessees 88-3 "Outer Continental Shelf Shallow Hazards Requirements for the Gulf of Mexico OCS Region" of September 7, 1983. EPA concludes that its decision for NPDES permitting in the CPA is basically consistent with that preferred by MMS.

Due to the reasons and attached permit conditions explained above, EPA Region 4 is able to make the "no unreasonable degradation" determination for OCS waters off Mississippi and Alabama, and for waters outside the 200-meter depth contour of the Eastern Planning Area. In contrast, EPA is not able to make this determination for the Eastern Planning Area waters shoreward of the 200-meter isobath. EPA believes that the exclusion of general permit coverage for these waters in the Eastern Planning Area is entirely suitable considering the unknowns about the presence of significant environmental resources, and the unknown sensitivity of the area to oil and gas activities. This approach is corroborated by the MMS consideration of the Destin Dome as a frontier area, requiring production projects to receive full EIS review.

Exclusion of certain OCS areas from General Permit coverage is not expected to cause operator delays, lost jobs, or reduced royalty revenues because the individual permitting process fits nicely with the MMS review times. Region 4 has recently issued several individual permits for exploratory drilling and one for production in the Central Planning Area. In all cases, the applicants have been cooperative. When industry is aware of the time frames needed for review and issuance of permits, the experience has been satisfactory to both the Agency and the applicant. One commentator pointed out that drill rigs are quite expensive and their use must be scheduled well in advance. This fact should then allow the permit applicant adequate time within which to accommodate the permitting process. It is important to note that EPA would not normally prepare an Environmental Assessment for an exploratory well, so the individual permitting time would be normally 2-3 months. EPA does not believe that the type of NPDES permit needed would have any bearing on industry's decisions whether to proceed with production.

Moreover, because there are historically few lease applications for the Eastern Planning Area, the delay, if any, of individual permitting will be

minimal. Regardless of the permitting mechanism, EPA is required to make a 403(c) ocean discharge criteria determination regarding the discharge. Where information necessary for the ocean discharge criteria determination is provided, there should be no delay in permit issuance where appropriate. With respect to this general permit, extension of the general permit coverage area would not expedite the permitting process, as there is currently little information regarding the marine environment and associated impacts from offshore oil and gas facilities in the Eastern Planning Area to make area wide determinations regarding Ocean Discharge Criteria at this time. Rather than delay the issuance of this general permit until sufficient information is available, EPA has determined that general permit coverage as provided herein is appropriate. Any person discharging from offshore oil and gas facilities may apply for and obtain an individual NPDES permit. This approach enables EPA to prescribe conditions to assure compliance with Ocean Discharge Criteria, as required by Sections 402 and 403 of the Act, and comports with EPA's general discretion regarding the issuance of permits. Individual permits may contain the same effluent limitations and conditions as the general permit, or may contain additional conditions based upon specific determinations regarding a facility as necessary to comply with the requirements of federal law.

EPA is aware of the type of environmental documentation MMS requires in applicants' development and exploration plans. EPA expects to utilize this same information in most cases for its permit review needs. Of the three NEPA documentation levels used by MMS, the categorical exclusion has minimal public review opportunities but is used much more than either the EA or EIS process. EPA believes that increased public review and a careful review of applicants' survey information by EPA could be a good check and balance to ensure activities are not damaging significant marine resources.

The modified two-tiered general permitting procedure suggested by two commenters is in EPA's opinion inconsistent with its guidelines for instituting a general permit. In places where site conditions are uncertain, greater scrutiny is needed to consider site-specific permit conditions. Regulations call for an individual permit review for such situations. EPA is striving for a maximum level of certainty on the part of industry. EPA Region 4 is researching literature and other information sources about live

bottom and other significant fish habitat and designating them areas of biological concern, in order to have these features identified prior to potential applicants seeking permits.

Comment 79: Several commenters opined that general permit coverage should be extended to the entire OCS in the Eastern Gulf, stating that EPA regulations favor the issuance of general permits.

Response: Pursuant to Section 402 of the Clean Water Act, EPA retains discretionary authority to issue permits for the discharge of pollutants (*Dedham Water Co. v. Cumberland Farms Dairy*, 805 F.2d 1074; 1st Cir. 1986). As the commenters pointed out, EPA's regulation governing General Permits at 40 CFR 122.28 provides that the Administrator shall, *except as provided below*, issue general permits covering discharges from offshore oil and gas exploration and production facilities "within the Region's jurisdiction." However, the commenters are incorrect that EPA must extend coverage of the general permit for offshore oil and gas exploration and production facilities to the entire Eastern Gulf. The regulations do not support such an interpretation, but rather state that for federally leased lands, the general permit area should "generally be no less extensive than the lease sale area defined by the Department of Interior." Consistent with the provisions of the Clean Water Act and decisions by the federal courts, EPA interprets this language as providing the Agency with discretion in the establishment of the appropriate geographical limitations for the general permit. In the preamble to the final regulation, EPA states, "EPA is committed to the issuance of all permits when, and only when, an adequate amount of information has been gathered with which to determine permit conditions." Final Rulemaking, 48 FR. At 39,617 (Sept. 1, 1983). Additionally, the commenters have failed to note that the Department of Interior has not offered in many years (if at all) the entire Eastern Gulf OCS area for lease sale. DOI has previously offered only limited areas in the Eastern Gulf OCS for lease sale, and many potential lease blocks offered for sale were not actually leased. DOI has identified only limited areas which will be offered for lease sale in the Eastern Planning Area during the pendency of this General Permit. There is therefore no rationale supported by 40 CFR 122.28 under which general permit coverage would be extended to the entire Eastern Gulf. As the commenters themselves point out, EPA's regulations authorize the issuance of individual

permits for offshore oil and gas facilities, which is the approach EPA has selected as most appropriate for the area shoreward of the 200-meter isobath in the Eastern Planning Area.

EPA's decision regarding general permit coverage area is based upon the analysis set forth in NEPA documentation and requirements set forth in the CWA. In issuing NDPEs permits for offshore discharges, EPA has an obligation under section 403(c) of the CWA to determine whether or not unreasonable degradation of the marine environment will occur as a result of the discharge. In accordance with guidelines published pursuant to Section 403(c), the Agency must make this determination prior to permit issuance, which often includes a complex analysis to develop adequate permit limitations. No permit can be issued if unreasonable degradation will occur. If there is insufficient information to make a determination as to unreasonable degradation, no NPDES permit can be issued unless the Agency determines such discharge will not cause irreparable harm to the marine environment. CWA § 403; 40 CFR § 122.124; *See Natural Resources Defense Council, Inc. v. EPA*, 19 Env. L. Rep. 20225 (9th Cir. 1988); *American Petroleum Institute v. EPA*, 787 F.2d 956 (5th Cir. 1986). In developing the Environmental Impact Statement (EIS) and other documentation required pursuant to the National Environmental Policy Act, EPA analyzed the alternative of extending general permit coverage to the entire Eastern Gulf. In the draft EIS, EPA determined that issuance of general permits seaward of the 200 meter isobath (alternative B) will not cause unreasonable degradation of the marine environment. As stated in the draft EIS, EPA is not able to make such a determination regarding discharges to any and all areas shoreward of the 200 meter isobath due to uncertainties about the presence of and impacts to sensitive and valuable marine resources. Draft EIS at ES-13 (Dec. 1996). With respect to the Eastern Planning Area, as the commenters point out, there are relatively few leases on which exploratory activities have taken place. Accordingly, there is little information regarding the marine environment and associated impacts from offshore oil and gas facilities in the Eastern Planning Area, as EPA stated in the EIS and fact sheets for the general permit. In support of their comment that general permit coverage should be extended to the entire Eastern Gulf, the commenters cite the variability of conditions encountered in oil and gas exploration.

This same variability and uncertainty, due to a lack of available information, makes a general permit for the entire Eastern Gulf inadvisable.

Comment 80: Regarding the Central Planning Area, several commenters pointed out that previous lease sales and ongoing activities have resulted in additional information regarding discharges from offshore oil and gas facilities for this region.

Response: EPA has confirmed, in consultation with the MMS, that EIS's prepared pursuant to these activities in the Central Planning Area have resulted in analysis of degradation to the marine environment from offshore oil and gas activities in this region, and inclusion of appropriate conditions and limitations in permits issued for offshore oil and gas discharges in the Central Planning Area. With respect to the Central Planning Area within Region 4's jurisdiction, EPA agrees that general permit coverage should be extended to the Central Planning Area with the exception of areas of biological concern (ABC's). EPA has identified in the general permit four ABCs for which general permit coverage is not provided, and reserves the right to identify additional ABCs in the future. As set forth in the general permit, ABCs are excluded from general permit coverage and therefore no discharges from offshore oil and gas facilities may commence without an individual permit.

Comment 81: Two commenters contended that this general permit violates interagency agreements between EPA and the Department of the Interior.

Response: The provisions of the interagency agreements cited by the commenters clearly establish, however, that EPA will issue permits "whenever possible," and the agreements themselves do not abrogate EPA's discretion in issuing NPDES permits and do not confer rights upon third parties. Furthermore, the interagency agreements specifically state that the types and timing of NPDES permits are dependent upon the development and exchange of information sufficient to address CWA section 403(c) Ocean Discharge Criteria. EPA is required by the CWA and its regulations to certify that any ocean discharge allowed by its permit will not cause an unreasonable degradation of the marine environment. In this situation, the issuance of general permits for the entire Eastern Gulf is clearly inappropriate. EPA's fact sheet for this general permit sets forth the basis and rationale for the geographic delineation of general permit coverage.

Comment 82: EPA does not sufficiently justify its selection of the 200 meter isobath as a general permit cutoff line. Studies conducted on facilities located in depths less than 200 meters, which are cited in both the EIS and ocean discharge evaluation report, indicated no widespread or long-term degradation to marine resources.

Response: EPA has extensively examined the available literature on the distribution of important benthic communities, fisheries habitats, and marine mammal habitats and has found that the areas over the continental shelf and shelf transition zone (approximated by the area out to the 200 meter isobath) contain an abundance of sensitive biological resources, particularly offshore Florida and Alabama in the Eastern Planning Area and in the excluded features offshore Mississippi. Consistent with its authorities noted above, EPA concludes that the abundance and sensitivity of the biological resources in the area offshore Florida and Alabama in the Eastern Planning Area warrant the extra protection afforded by the thorough, case-by-case review possible with individual permitting.

The absence of study results is not sufficient grounds for concluding that facilities in water depths less than 200 meters would cause no widespread or long-term degradation to marine resources in the eastern Gulf. Few, if any, studies have been conducted in the waters of the Florida Shelf. Moreover, the effects of produced water discharges, particularly the potential for bioaccumulation, are neither well studied nor well understood.

While the 100 meter isobath may account for most or all live bottom communities, waters up to 200 meters appear important for some fish species. Moreover, MMS' live bottom protections cannot be solely relied upon because they are not attached to all lease sales and because the determination of what protective measures to require is at the discretion of the MMS Director, in consideration of what would be "environmentally, economically, and technically appropriate". Therefore, EPA's selected alternative allows no activities in the Mobile or Viosca Knoll lease areas before the operator documents the absence of a live bottom through a bottom survey.

Comment 83: Many commenters expressed a preference for Alternative C—No issuance of general permits. A few of these commenters explained that individual permitting is preferred because it allows for a more thorough review of impacts. Other comments noted uncertainties about impacts. One

commenter expressed a desire for public input into the permitting of each well.

Response: The current National Pollutant Discharge Elimination System (NPDES) permitting process was determined by the U.S. Congress and is outlined in the Clean Water Act. According to the NPDES regulations, EPA is allowed to promulgate general permits for discharges into federal waters. The Minerals Management Service of the Department of the Interior issues permits for oil and gas drilling operations. EPA is authorized to consider whether permits for the discharges generated from these drilling and production operations should be issued.

EPA however, has identified regions within the Gulf of Mexico that are more sensitive and require discharges to be reviewed on a case by case basis. These areas are within the 200 meter isobath in the MMS Eastern Planning Area and within 1,000 meters of areas of biological concern. The general permit does not cover these areas and instead EPA is requiring operators to submit an application for an individual permit. Additionally, there are 4 features that are described in the Revised permit and Fact Sheet that may warrant case-by-case review and will be subject to a public notice comment period. Therefore, the Regional Administrator has the authority to issue individual permits after proper notice has been provided to the permittee and solicit public input on these individual permits during the public notice comment period.

While EPA has concerns about activities near areas of biological concern, we believe that the standards that would be imposed on operators are adequate to protect most marine environments. Based on the factors and considerations required under the Ocean Discharge Criteria regulations (40 CFR 125) the ODCE evaluated available information and, under these regulations, has concluded there is sufficient information to determine there will be no unreasonable degradation of the marine environment from permitted discharges with all permit conditions, limitations, and monitoring in place. While there are areas of outstanding data needs, these needs are not considered sufficient to materially affect this determination. For example, although data are insufficient to "conclude that regional-scale impacts are not occurring," the impacts referred to are low magnitude, chemical alterations in sediments that are not expected to result in any appreciable ecological or human health impacts. Although impacts on deep water

communities are not known with a high degree of certainty, no appreciable impacts are foreseeable based on knowledge of impacts in shallow environments.

Information gathered from the required monitoring will be used, along with other new information that becomes available, to determine whether and how to modify permit conditions in the future permit reissuances that occur every five years. Most hydrocarbon resources are anticipated to be in the form of natural gas. EPA would consider additional conditions specific to an oil discovery. In addition, MMS stipulations and regulations, and the EPA option to exercise its own live bottom stipulation, are in place to protect sensitive benthic resources. EPA does not have the authority to not issue permits without a reasonable certainty that proposed actions would violate environmental quality standards.

EPA agrees that the individual permitting strategy for the MMS Eastern Planning Area provides for much greater public awareness and involvement. However, the Agency regulations encourage the implementation of general permitting where suitable. Environmental safeguards are being put in place with the proposed General Permit.

Comment 84: Alternative B provides special protection for shallow water through Individual Permits at the expense of deep water protection that only require General Permits. This is a double standard.

Response: Regulations promulgated under the Clean Water Act (40 CFR 122.28(C)(1)) require EPA to issue general permits unless the area includes areas, "such as areas of biological concern, for which separate permit conditions are required." EPA has determined that the Gulf OCS offshore Florida and Alabama in the Eastern Planning Area within water depths shallower than 200 meters includes extensive live bottom and other particularly valuable marine habitats that have not been adequately located nor fully characterized. In addition, greater dilutions are generally achieved in deeper waters and discharges must cover greater distances to reach sensitive resources. For these reasons, EPA has decided to require individual permits inside the 200-meter isobath within the MMS Eastern Planning Area. In contrast to the areas shoreward of the 200 meter isobath, the biological communities at greater depths are widely scattered, protected by an MMS notice-to lessees (NTL 88-11) that applies to all leases, and is of localized

significance only. The Gulf OCS offshore Mississippi (with the exception of the excluded areas), does not have the physiographic characteristics making it likely to have an abundance of live bottoms. Nevertheless, EPA is requiring operators in this area to undertake a live bottom survey as a condition of EPA approval before conducting activities in the Mobile and northeast Viosca Knoll lease areas.

For these various reasons stated above, EPA considers that the conditions in the general permit, along with existing measures, are adequately protective of these resources.

Comment 85: There is an absence of evidence showing that there is no irreplaceable or irrevocable harm to the environment. Alternative C is the only acceptable option.

Response: The effluent discharge criteria allow a certain degree of adverse impact to sensitive life stages of organisms within the zone of mixing, so virtually every wastewater discharge will have some limited impact to the marine environment. Regarding the sufficiency of environmental impact data, EPA is stating that it is able to make a finding of "no unreasonable degradation" in accordance with Clean Water Act Section 403(c), the Ocean Discharge Criteria Evaluation, for its portion of the MMS Central Planning Area, and seaward of the 200-meter isobath of the MMS Eastern Planning Area. The agency is not comfortable with such a blanket determination in shallower waters.

Comment 86: Persons commented that EPA should require zero discharge of effluent for some or all facilities. Some persons commented that EPA should not issue any permits.

Response: Based on its reviews and impact evaluations conducted in support of the Ocean Discharge Criteria Evaluation and the draft EIS, EPA concludes that the proposed permits offer the fullest protection allowed by law. Allowing no discharges would place an unreasonable burden on operators, one that is not justified by the incremental environmental protection. EPA understands the public concern about drilling and the recommendation for no discharges within 100 miles of shore. EPA cannot support that broad of a constraint but does preclude general permit coverage of discharges within 1000 meters of areas of biological concern. EPA evaluates during permit reviews whether discharges are acceptable in a given location. Unless areas of biological concern are present, or the proposed discharge would violate water quality standards, discharges are usually approved since the effluent

limitations are set to minimize adverse impacts. At any time, an applicant could elect to undertake a no-discharge project; "no discharge" is therefore not equivalent to "no drilling". There is thus no difference in the risk of an oil spill between a facility having a no-discharge limitation for wastewater and facilities with permitted discharges.

Comment 87: Many persons commented variously that there should be no drilling in the Eastern Gulf, no drilling off of Florida, or no drilling within a certain distance of the coast. Some commenters noted that Congress and/or the President should place a moratorium on offshore drilling. One commentor suggested collection of tax money on various energy uses and use of the revenues to buy back the leases.

Response: EPA has no authority to prohibit offshore hydrocarbon exploration or production. Such authority lies to a limited extent with U.S. DOI's MMS, which manages the Outer Continental Shelf leasing program, and ultimately with the U.S. Congress and the President, which can enact and declare leasing and drilling moratoria and can authorize the buying back of outstanding leases. The only alternatives available to EPA to consider are issuance of general permits (various versions of such permits are possible) and No Action, which is non-issuance of general permits. EPA must accept and act upon applications for NPDES and air permits. Further, even if EPA would deny an NPDES permit to an applicant, that entity could possibly elect to operate without discharging any effluent, and therefore not require an NPDES permit.

Persons who own or wish to operate facilities which may discharge any pollutant must submit a complete application for such permit as provided in 40 CFR Part 122, or comply with the requirements for application for coverage by a general permit. EPA's decision regarding permit issuance and/or conditions of permits would be subject to the requirements of the Clean Water Act and regulations. EPA does not expect applications for individual permits (or general permit coverage) to be made where the activity is prohibited by federal law or the laws of other sovereign entities. However, CWA regulations do not preclude a person from making application for an NPDES or air permit for discharge for an activity which is prohibited by federal law or other sovereign entities. Pursuant to Section 511 of the Clean water Act, 33 U.S.C. § 1371, nothing in the Clean Water Act may be construed as limiting the authority or functions of any officer or agency of the United States under any

other law or regulation. Accordingly, should such federal moratoria or lease-buy back be enacted, EPA actions with respect to any permit application would not supersede or override such moratoria or lease buy back.

EPA evaluates during permit reviews whether discharges are acceptable in a given location. Such review includes the assessment of environmental impacts as set forth in the Clean Water Act and regulations, including 40 CFR Part 122, 124, 125, 129, 130, 131, 132, and 133. EPA may impose conditions for permits on a general or case-by-case basis, to provide for and assure compliance with all applicable requirements of the Clean Water Act and regulations or as the Administrator determines are necessary to carry out the provisions of the Clean Water Act. CWA § 402, 33 U.S.C. § 1342. Conditions applicable to all NPDES permits are set forth in, *inter alia*, 40 CFR Part 122–133. When applicable, EPA includes effluent limitations and standards as provided in the Clean Water Act and regulations. Such conditions, effluent limitations, and standards would be established to minimize any adverse impacts which may result from the proposed discharge of pollutants, including conditions necessary due to the presence of areas of biological concern, or necessary to protect or achieve water quality standards. At any time, an applicant could elect to undertake a no-discharge project. EPA may also deny issuance of a permit where the discharge fails to comply with the Clean Water Act and regulations.

The EIS identifies one moratorium area (Eastern Planning Area, south of 26° N latitude) as being excluded from proposed General Permit coverage. According to the MMS, that area has been under a moratorium for oil and gas activity and leasing imposed by President Bush in 1990. The MMS has since then bought back the leases in that moratorium area. While there have been annual leasing moratoria imposed by the President and/or Congress pertaining to MMS new lease sales in the entire Eastern Planning Area since 1992, the only moratorium relevant to the EPA and therefore excluded from any NPDES permitting is that area south of 26° N latitude. Leasing moratoria are prohibitions against offering the covered area in a lease sale; they do not affect those lessees holding valid leases and seeking permits. EPA believes there are no leases held in OCS areas within EPA Region 4 jurisdiction presently under any exploration or production activity moratoria.

Comment 88: By allowing industry to drill for oil and gas in the Eastern Gulf of Mexico, the government ignores huge gaps in information on the effects of drilling.

Response: EPA has noted the commenters' statements regarding impacts of discharges into the Gulf of Mexico and agrees that in some instances information may not be available regarding the environmental effects of drilling for portions of the Gulf. For this reason, EPA chose the alternative set forth in the draft EIS consistent with available information. In addition, EPA acknowledges that all environmental effects of discharges into marine waters cannot be measured and known with certainty. However, Section 403(c) of the Clean Water Act provides EPA with the authority to make the determination based on existing information if EPA determines that the discharge will cause no unreasonable degradation of the marine environment under the NPDES permit.

EPA has evaluated available data, including information submitted pursuant to public comment on the draft EIS and permit, and has found it to be adequate to assess the potential impacts to marine waters, endangered species, marine life including the benthos for those areas of the Gulf of Mexico covered by this general permit. EPA has determined that, though some impact may occur, "unreasonable degradation" will not result due to the permit issuance, which is the preliminary determination of the Ocean Discharge Criteria Evaluation.

Comment 89: EPA should revise Alternative B to include general permits seaward of the 200 meter isobath line or a distance of 100 miles, whichever is greater. In a similar vein, two commenters offered that general permit coverage should begin at some (unspecified) minimum distance from the coast.

Response: EPA considered various distances from important coastal resources for suitability of a general permit, including several distances from coastal barrier islands. EPA Region 4 selected the 200-meter depth contour because it has scientific basis.

Regulations promulgated under the Clean Water Act (40 CFR 122.28(C)(1)) require EPA to issue general permits unless the area includes areas, "such as areas of biological concern, for which separate permit conditions are required." EPA has extensively examined the available literature on the distribution of important benthic communities, fisheries habitats, and marine mammal habitats and has found that, particularly offshore Florida and

Alabama in the Eastern Planning Area, the areas over the continental shelf and shelf transition zone (approximated by the area out to the 200 meter isobath) contains an abundance of sensitive biological resources. Consistent with its authorities noted above, EPA concludes that the abundance and sensitivity of the biological resources in this area warrant the extra protection afforded by individual permitting in waters offshore Florida and Alabama in the Eastern Planning Area and a live bottom survey requirement in the Mobile and Viosca Knoll lease areas. In contrast, demarcating a 100-mile cutoff for a permitting decision has no scientific, ecological basis, and as such is not supported by EPA's regulatory authority.

Comment 90: Areas of Biological Concern warrant the use of individual permits. These communities are scattered throughout the eastern Gulf and their exact locations are not known. The use of individual permits will allow the state (Florida) to work with EPA to adequately define resource issues and areas of biological concern.

Response: EPA believes that the potential for areas of biological concern in the Mobile and Viosca Knoll lease areas warrants the requirement for operators to conduct a live bottom survey before hydrocarbon exploration and development activities can take place in these areas. EPA has concluded that, because the resources in the Gulf offshore Florida and Alabama in the Eastern Planning Area are less well known, and somewhat different than the resources to the west, individual permits (for activities in waters less than 200 meters depth) are appropriate. See Section 2.4 of the Final EIS.

Comment 91: EPA does not have enough information to issue permits for offshore drilling near Florida shores.

Response: The Agency has reviewed available information and has determined that there is sufficient information to issue the general permit for the areas covered. The analyses are presented in the ODCE.

Comment 92: There should be a process to provide transition coverage to leases that would lose general permit coverage so that activities can proceed uninterrupted while a new permit is being developed and issued. EPA could grant non-operational leases the same interim coverage proposed for operational leases.

Response: EPA appreciates lessees' concern about when the old General Permit coverage expires and the new General Permit becomes effective. In the proposed new General Permit area (Region 4 Central Planning Area

jurisdiction and outside the 200-meter isobath of the Eastern Planning Area) EPA would accept from a lessee a Notice of Intent for coverage under the new general permit within 60 days of the new General Permit becoming effective. The lessee's project would be considered operational if the Notice of Intent received indicates a discharge has occurred within 2 years of the effective date of the new General Permit, and may proceed with old General Permit coverage if that lease had old permit coverage. New General Permit coverage commences when EPA notifies the operator of such coverage. Otherwise, non-operational projects have no coverage until EPA grants coverage following filing of an Exploration Plan with MMS. Please also refer to Table 1 in the Supplemental Information Section IV.

Comment 93: The draft general permits will have a deleterious effect on drilling and workover operations by requiring a new permit for each rig moved to a new drilling location or to work over an existing well, and the permitting process would take six months. Workover rigs may be needed immediately to secure and safeguard operational problems.

Response: The NPDES regulations allow such activities to be covered in a single permit. Further, EPA customarily follows the MMS procedure of "unitizing" a project having multiple site (lease block) activities where the activities are part of one development and production plan and thus subject to a single NPDES permit.

Comment 94: The permit should allow transfer for coverage from one operator to another. This provision would be consistent with the Region 6 permit.

Response: The previous current existing general permit allows transfer of coverage upon proper notification to EPA Region 4, but due to the confusion in agreements and leases sometimes changing hands a few times every year, Region 4 has now placed the burden of giving proper notification to the agency in the hands of the operator. This will allow general permit coverage to be updated on all leases by the agency as they occur in EPA's permit compliance system. Additionally, it will give EPA more information at the time the notice is filed on drilling proposals of development plans that are being developed for the proposed areas in question and whether the facility is eligible for coverage under either the new source or existing source general permit. The Region believes that filing these notices for transfer of leases by the operator fulfills the requirement under

minor modifications (40 CFR 122.63) when transfers do occur and allows the Region to have an accurate record of transfers as they occur in the Region 4 jurisdictional area.

Comment 95: The second paragraph in Part I.A.2 of the permit should be revised to say: "leases occurring below the 26 degree parallel which are currently under moratorium are excluded from coverage under these general permits." The existing permit language would deny an operator the benefits of the permit—even for leases outside of the moratorium area if he merely held leases in the moratorium area. It was EPA's intent to deny coverage to the leases in the moratorium area, instead of the operator. A similar concern applies to ineligibility for coverage within 1,000 meters of an area of biological concern.

Response: The comment represents an unreasonable interpretation of the general permit provisions. The general permit language clearly prohibits discharges within 1000 meters of an Area of Biological Concern and operations below the 26 parallel, and excludes from general permit coverage operations of any operator who seeks to discharge within the 1000 meter buffer zone and below the 26 parallel. The language should be read in context of the section in which the language is placed.

Comment 96: EPA has the ability to impose various restrictions on discharges in specific areas that are determined to be of high habitat or resource value. By placing Areas of Biological Concern off limits, EPA has greatly reduced its uncertainty about causing unreasonable degradation.

Response: EPA agrees with that the current permit contains discharge limitations, such as the requirement to apply for an individual permit for facilities located within 1,000 m of areas of biological concern, that ensure no unreasonable degradation of marine waters will occur within the permit coverage area. EPA has reached this conclusion in the process of conducting the Ocean Discharge Criteria Evaluation (ODCE) for the proposed permit. The ODCE outlined potential environmental impacts resulting from the permit and found that the permit will not cause unreasonable degradation of the marine environment.

Comment 97: EPA has the ability to impose various restrictions on discharges in specific areas that are determined to be of high habitat or resource value. By placing Areas of Biological Concern off limits, EPA has greatly reduced its uncertainty about causing unreasonable degradation.

Response: EPA agrees with that the current permit contains discharge limitations, such as the requirement to apply for an individual permit for facilities located within 1,000 m of areas of biological concern, that ensure no unreasonable degradation of marine waters will occur within the permit coverage area. EPA has reached this conclusion in the process of conducting the Ocean Discharge Criteria Evaluation (ODCE) for the proposed permit. The ODCE outlined potential environmental impacts resulting from the permit and found that the permit will not cause unreasonable degradation of the marine environment.

Comment 98: Metals are tightly bound to drilling fluid solids and do not readily leach off into the aqueous phase of the mud following discharge to the ocean (Trefry et al., 1986).

Response: Metals found in the drilling fluid discharges are predominantly associated with drilling fluid solids. However, a small fraction of the metals bound to the drilling fluid solids is known to solubilize into the water column and sediment pore water. This fraction is expressed as the leach percentage. The ODCE drilling mud dilution analysis has been revised to include the leach percentage factor of the corresponding metal for two scenarios: mean seawater leach and pH5/7.8 maximum seawater leach. The leach percentages used in the ODCE are derived from Liss et al. (1980), Kramer et al. (1980), McCulloch et al. (1980), and Trefry et al. (1986).

Comment 99: [ODCE Comment] No information is given about whether the concentrations of metals reported in Table 3-2 of the ODCE for barite are "typical", mean, or upper limit concentrations for drilling mud grade barite. Some of the concentrations seem high, particularly those for chromium, nickel, and tin, when compared to the data presented in EPA (1985a), Table 2-3. However, the mercury and cadmium concentrations listed in Table 3-2 are below permit limits.

Response: Stock barite that meets metals limitations is referred to by EPA as "clean" barite (EPA, 1993b). The data presented in Table 3-2 of the ODCE represent mean metals concentrations for "clean" barite. These barite characterization data are found in the Offshore Oil and Gas Effluent Guidelines Development public record and were provided by industry as EPA Region 10 Discharge Monitoring Report Data.

Comment 100: [ODCE Comment] The use of diesel fuel in drilling fluid destined for ocean disposal is prohibited and the use has therefore

decreased. Thus the discussion in the ODCE may not be completely representative of current practice in the U.S. Gulf of Mexico.

Response: The use of diesel fuel has decreased since the early 1980s and alternatives, such as synthetic based muds, have increased. Although drilling fluids containing diesel are not permitted to be discharged, there is no prohibition on their use. The ODCE was drafted prior to promulgation of final offshore effluent limitations guidelines and has been updated to reflect current drilling fluid usage trends.

Comment 101: [ODCE Comment] Regarding the ODCE, the inclusion of a paragraph on oil-based drilling muds without any qualifications leaves the impression that oil-based drilling fluids and oily cuttings are discharged to U.S. waters."

Response: EPA agrees and has noted in the ODCE the discharge prohibition of oil-based muds.

Comment 102: [ODCE Comment] The commenter requests clarification on the characterization of pollutant concentrations for drilling fluids as presented in the ODCE.

Response: The ODCE used pollutant concentrations as developed for the final offshore effluent limitations guidelines.

Comment 103: [ODCE Comment] Drill cuttings do not contain up to 60 percent by volume adhering drilling fluids as is documented in the draft ODCE. The amount of drilling fluid that remains attached to cuttings after treatment in the mud and cuttings treatment system on the platform varies. According to Neff, et al. (1987), a typical cuttings discharge contains 5 to 10 percent drilling fluids solids. The 60 percent estimate is attributable to Ayers et al. (1980a) by EPA (1985a), but this estimate could not be found in Ayers et al. Also, the concentration units in Table 3-4 of the ODCE are not $\mu\text{g}/\text{l}$ as reported, but rather percent by weight.

Response: EPA stands by the technical accuracy of its statement in the ODCE. The statement in USEPA (1985a) could have been better structured to more clearly reflect its intention to state that the "other data" as presented in Ayers et al. (1980a) is the source of the 40% to 60% estimate of adherent fluids, not Ayers et al. themselves. EPA's estimate of adherent fluids is based on the data presented in Table 10 of Ayers et al. (1980a).

With regard to Table 3-4 of the draft ODCE, the commenter is correct that the units of the table should be percent by weight. This has been corrected in the final document.

Comment 104: [ODCE Comment] The commenter questioned the source of the data presented in Table 3-5 of the ODCE and whether the concentrations listed represent means, typical concentrations, or highest expected concentrations. Lower values are given in Table 3-5 of the EIS and are based on BCT/BAT/NSPS-level treatment with improved gas flotation. In order to meet the new effluent standards for oil and grease in produced water (42/29 mg/L), operators will have to adopt the advanced produced water treatment technology (Otto and Arnold, 1996). Therefore, the concentrations in Table 3-5 of the EIS (EPA, 1996) are more appropriate to represent likely chemical concentrations in "typical" produced water, rather than the overall "average" values listed in Table 3-5 of the ODCE document. The commenter also questioned the concentrations of several pollutants in Table 3-5 namely, benzo(a)pyrene, chlorobenzene, di-n-butylphthalate, and p-chloro-m-cresol.

Response: The commenter is correct that current offshore produced water discharges must meet oil and grease limitations of 42 mg/l daily maximum and 29 mg/l monthly average based on improved performance gas flotation. The ODCE was drafted prior to promulgation of final offshore effluent limitation guidelines (ELG). EPA revised Table 3-5 of the final ODCE to reflect the current characteristics of offshore produced water effluent. Data presented in Table 3-5 are consistent with those provided in the Environmental Impact Statement (EIS). The characterizations of produced water effluent from improved gas flotation were obtained through "a statistical analysis of data collected by EPA and submitted by industry" and was used in the offshore ELG development (EPA, 1993). Pollutant concentrations, including benzo(a)pyrene, chlorobenzene, di-n-butylphthalate, and p-chloro-m-cresol are significantly lower in produced water discharged after treatment using improved gas flotation.

Comment 105: [ODCE Comment] The high concentration of organic carbon in produced water is not attributable primarily to volatile aromatic hydrocarbons and aliphatic hydrocarbons as stated in the ODCE. Most of the organic matter in produced water is in solution and consists of a mixture of low molecular weight carboxylic acids which are common in marine sediments and are not toxic to marine organisms. Also Gulf produced waters also contain phenols which, although toxic to marine organisms, biodegrade rapidly in the marine environment.

Response: The information submitted by the commenter is noted and the ODCE has been updated to reflect the additional information. Although it is true that many of the constituents present in effluent discharges are also common in marine sediments, some are not. While it is true that phenol biodegrades rapidly, it is phenol (not any metabolic product) that is discharged in the permitted effluent and which must be evaluated against water quality criteria.

Comment 106: [ODCE Comment] Two comment letters expressed the opinion that the text of the ODCE misrepresents the volumes of produced water discharged by individual platforms.

Response: The ODCE presents the range of produced water volume discharged from offshore facilities in the central and western Gulf of Mexico as rates between 134 bbl/day to 150,000 bbl/day. The distribution of produced water discharges for offshore platforms has been studied and published by EPA in the Offshore ELG Development Document (EPA, 1993b). Information presented in the ODCE regarding produced water volumes discharged in the Eastern Gulf of Mexico has been updated.

Comment 107: The modeling of drilling fluid dispersion as presented in the ODCE is not representative of drilling fluid discharge conditions that might occur in the eastern Gulf of Mexico.

Response: EPA agrees that a 5-meter depth scenario is not realistic for conditions in the Eastern Gulf of Mexico. However, the general permit must be adequately protective in all areas of its coverage. Therefore, drilling fluid dilution modeling must assess the shallowest area under the maximum permit allowable discharge rate, high mud weight, (i.e., worst-case) scenario.

EPA has revised the presentation of the drilling fluid dilution model data in the ODCE and EIS. Several different water depths are used to represent different depth ranges of the permit coverage area. In addition, dilution at the edge of the 100m mixing zone is used for water quality analyses as opposed to dispersions as presented in the previous version of the ODCE.

The water depths and corresponding mean dilutions selected from the OOC Model results are: 15m (mean dilution = 562), 40m (mean dilution = 787), and 70m (dilution = 1,721). All other parameters, that is, the discharge rate, the mud weight, and the current speed were not changed in any of the chosen model scenarios. The discharge rate at each of the above-mentioned depths was 1,000 bbl/hr as in the original ODCE

since this parameter is the maximum allowable discharge rate under the permit. Using this high discharge rate as well as the OOC model mud weight and current speed, EPA presents in the ODCE the results of dilutions under the most conservative conditions provided by the permit. EPA has noted in the current ODCE that the results are conservative and that normal operations in the Gulf of Mexico would result in greater dilutions of solids at the edge of the 100m mixing zone.

Comment 108: Several of the human health criteria (fish consumption) are unrealistic or inappropriate based on comparison to ambient concentrations (arsenic) or to carcinogenic PAHs (anthracene vs. benzo[a]pyrene).

Response: The water quality criteria used for the water quality analysis have been updated to include the most recently published criteria. Water quality criteria are proposed and subject to public comment as with any EPA rulemaking. For the purpose of the water quality analysis, the criteria are used as guidelines for determining potential effects.

Comment 109: [ODCE Comment] In discussing physical fate, the ODCE refers to "dilution" and "dispersion." Unfortunately, "dispersion" is commonly used to refer to the far-field mixing that occurs under the influence of turbulent eddies, a quite different usage than that in the ODCE. The phrase "differential settling and removal to the bottom" should be used instead of "dispersion" in the ODCE.

Response: The discussion in the ODCE has been revised to clarify the terms "dilution" and "dispersion."

Comment 110: [ODCE Comment] In several places, the ODCE refers to horizontal distances at which some amount of drilling effluent deposition occurred. These distances are only for the specific literature citations mentioned. For example, the results in Ayers, et al. (1980) were for a total settling distance of 20 meters. In general, the greater the settling distance (discharge pipe to bottom) the greater the time for settling and the distance traveled. Also, dispersion increases. These factors may lead to greater or lesser amounts of deposition at specific distances, depending on currents and particle settling velocities.

Response: EPA agrees that, in general, the greater the drilling effluent settling distance (i.e., discharge pipe to bottom) the greater the time for settling and the distance traveled. The ODCE describes in detail the processes or pathways that affect both the upper and lower plumes. The ODCE was revised to include

settling distance as a factor affecting the physical transport processes.

Comment 111: [ODCE Comment] The following ODCE statement should be restated: "Density stratification contributes to the dissipation of dynamic forces in the dynamic collapse phase of the plume, which represents the point at which passive diffusion and settling of the individual particle become the predominant dispersive mechanisms." If a plume is trapped in a stratified water column, the density is the mechanism that drives the collapse of the plume (the spreading out of the plume at its level of neutral buoyancy). After sufficient spreading, the spreading rate caused by dynamic forces declines to the spreading rate that occurs from turbulent dispersion (the so called far-field dispersion that dominates thereafter).

Response: EPA agrees with the commenter's restatement of the dynamic of plume collapse. The clarifications have been incorporated into the discussions of the ODCE as appropriate.

Comment 112: [ODCE Comment] Sediment reworking by bioturbation, if it has any effect at all on the environmental impacts of deposited drilling fluid solids, will tend to decrease their impacts by mixing and diluting the solids in the sediment column.

Response: EPA has noted in the ODCE that bioturbation is the process by which organisms rework the sediment, thereby mixing surface material and deeper sediment layers. This process incorporates drilling fluid solids into the sediment and disperses drilling fluid solids. However, this process also may resuspend previously settled solids and may expose more benthic organisms to drilling fluid solids.

Comment 113: [ODCE Comment] Contrary to statements in the ODCE, metals do not "always increase in sediments near drilling rigs due to deposition of drilling fluids (Boothe and Presely, 1985)"

Response: The ODCE does not suggest that several metals always increase in sediments near drilling rigs. The ODCE states clearly "the only two metals clearly associated with drilling fluids that appear to be elevated are barium and chromium."

Comment 114: [ODCE Comment] The data source presented in the ODCE to demonstrate that mercury and other metals from drilling fluids are likely to accumulate in sediments and organisms near drilling operations were subsequently found to attribute the mercury source to erosion (Crippen et al., 1980) or to be proven erroneous

(Mariani et al., 1980; Gillmore et al., 1985).

Response: The comment is noted and the final ODCE contains updated information and revisions.

Comment 115: The area of potential effects of water-based drilling fluid discharges on the benthos nearly always is less than 1,000 m from the discharge, except in very shallow waters with restricted mixing and circulation. There have been no documented cases where petroleum hydrocarbons accumulated from water-based drilling muds or produced water in sediments to high enough concentrations to cause substantial adverse effects over a wide area. While the effects of oil-based muds may extend out to 1,000 meters or so, the discharge of such muds and cuttings is prohibited.

Response: The current ODCE has been revised to discuss the impact of water-based drilling fluid discharge on the benthos rather than impacts of oil-based mud discharge.

Comment 116: [ODCE Comment] Most of the studies reviewed concerning the fate of produced water are for shallow coastal waters, not representative of most of the OCS of the eastern Gulf of Mexico. Several more recent references are also available.

Response: The comment is noted and the final ODCE contains updated information and revisions.

Comment 117: Two comment letters questioned the application of the CORMIX model to analyze the fate of produced water discharges. They also contended that the statement of Brooks' equation for the 4/3 law farfield dilution is wrong in the ODCE.

Response: In developing the final general permit for the Eastern Gulf of Mexico, EPA Region 4 has used the most recent CORMIX model (Version 3.20), which is supported by EPA Headquarters. The produced water discharge scenarios were rerun with updated facility discharge data (i.e., produced water discharge rates) using this revised version of CORMIX. Brooks' 4/3 power is not used in the updated CORMIX version.

Comment 118: Chronic effects of produced water discharges are extremely unlikely in the water column. In all but the most poorly mixed enclosed water bodies, mixing is sufficient to prevent a chronic increase in concentrations of hydrocarbons and metals in the water column near the discharge. Environmentally significant accumulation of hydrocarbons in sediments near produced water discharges occurs only in shallow coastal and enclosed waters, such as

Trinity Bay, TX (2–3 m deep) (Armstrong et al., 1979).

Response: EPA agrees and notes that the ODCE and EIS have statements to the effect of those made by the commenters.

Comment 119: The source of the high radium concentrations in coastal and offshore waters of west Florida is runoff from phosphate mining and natural phosphate deposits, rich in radium isotopes, in the area (Fanning et al., 1982; Miller et al., 1990).

Response: The permit coverage area does not cover the cited Florida coastal waters and radium concentrations found in open Gulf waters are more appropriate for comparison with discharges occurring under the permit.

Comment 120: The products used in drilling are toxic. Spills, small and large will occur and the toxins will ruin our beaches and waters. [72]

Response: The effects of discharges of drilling fluids were examined in the DEIS and Ocean Discharge Criteria Evaluation.

Comment 121: The environmental consequences summarized in the ODCE should be consistent with those summarized in the DEIS (e.g., number of pollutant discharges in drilling fluids that exceed AWQC). [112]

Response: The commenter is correct that the DEIS and the draft ODCE contain different conclusions of water quality criteria exceedences from drilling fluids discharges. Both conclusions are based on the same Offshore Operators Committee Muds Model data and water quality compliance criteria. The difference is attributable to selecting and summarizing results of the water quality analysis and not in the methods or criteria used to determine water quality compliance. Both analyses are derived from data used and presented for the development of the effluent limitations guidelines for the offshore subcategory. The model results (presented in Table 4–5 of the original ODCE) were used for both analyses. The DEIS used results as presented in the RIA for the Effluent Limitations Guidelines rulemaking (U.S. EPA, 1993a, as extracted from Avanti, 1993). This analysis presented effluent concentrations at the edge of a 100-meter mixing zone based on the average dispersions attained at water depths of 5 m, 19.8 m, and 50 m using two leachability assumptions (mean seawater extraction and pH 5 extraction). The results reported in the DEIS are based on the results of the mean seawater leach condition at a 50-meter water depth. The discussion in the ODCE reports a more conservative

case—using the pH 5 extraction—at a 20-meter depth.

Both the FEIS and Revised ODCE present a revised and consistent methodology for the water quality analysis, using two commonly accepted extraction factors (the maximum seawater pH and pH 5/7.8), and dilution estimates for three water depths (15, 40, and 70 meters) which represent the range of depths in the central planning area portion of the permit coverage area. The FEIS text reflects these changes and the Revised ODCE presents the detailed methodology. Also, some changes have occurred to the Federal Water Quality Criteria and these are reflected in the water quality analyses of the FEIS and ODCE.

Comment 122: The proposed NPDES general permits are an improvement over prior regulations, but Alternative B does not sufficiently protect water quality. The Gulf is already receiving a large amount of the nation's toxic pollutants (the five Gulf states rank high among the top 10 states with the largest Toxic Release Inventory releases). The present regulatory programs do not protect nor improve water quality.

Response: In preparing for its Ocean Discharge Criteria Evaluation (ODCE), EPA examined existing studies of water quality and toxicity effects of drilling and production discharges and has conducted discharge modeling of drilling fluids and produced water. EPA has made the ODCE determination that, based on the available information, the permit limitations are sufficient to determine that no unreasonable degradation should result from the permitted discharges. The potential impacts of effluent discharges would be minimized by the effluent discharge limits established in the permits and dispersion of surface discharges. Short-term biological effects are expected to be limited to less than 1,000 meters from drilling and production sites. Monitoring parameters would be applied to determine concentrations in discharges and surrounding waters as a basis to adjust limitations in the future.

Comment 123: Pollutants are having a cumulative impact on the Gulf, affecting marine mammals, causing red tides, creating dead zones, increasing fecal coliform counts, decreasing the seafood harvest, and causing mercury contamination of seafood. Human exposure via swimming in contaminated waters is also a concern.

Response: Pollutant modeling results have shown pollutant concentrations associated with produced water discharges are diluted to levels below federal and state water quality standards within 100 meters of the discharge.

Concentrations of certain pollutants in drilling fluids (arsenic, beryllium, chromium, copper, lead, and mercury) do exceed some of the federal and state water quality standards when measured at the edge of a 100-meter mixing zone. However, the exceedances are not great, such that concentrations would reduce to background levels at least several miles (for discharges at the shoreward limit of federal OCS waters) from where any swimming would be taking place.

Comment 124: Routine offshore drilling operations and pipeline installation dumps thousands of pounds of toxic drilling muds into the ocean.

Response: The effects of the toxic constituents in offshore drilling discharges have been examined in the Ocean Discharge Criteria Evaluation and draft EIS. EPA concludes that the discharges will not result in an unreasonable degradation of the marine environment. The potential impacts of these discharges are minimized by the effluent discharge limits established in the permits, including the “clean barite” requirement, the prohibition on the discharge of cuttings contaminated with oils, and the aquatic toxicity limitation.

Comment 125: Siltation is briefly mentioned in the EIS, but it needs its own study.

Response: The EIS mentions that localized impacts of siltation may occur from trenching related to pipeline emplacements. Because of its highly localized nature, this effect is not considered as a substantial impact on Gulf of Mexico resources. The effects of drilling mud discharges and resuspension of sediments are examined at various points throughout chapter three of the draft EIS and are concluded to not have a substantial impact.

Comment 126: Support vessels also affect offshore waters since discharges occur from these sources.

Response: Recent MARPOL regulations pertaining to ships are applicable to service vessels, and these regulations place much tighter restrictions on bilge discharges. The issue of course is enforcement and the U.S. Coast Guard has this responsibility but MMS also does limited inspection of barges at rigs and platforms.

Comment 127: Most of the major bays experience hypoxic conditions during the summer, and Mobile Bay is experiencing hypoxic conditions during the winter. Panama City Waters, Choctawhatchee Bay and Mobile Bay contain shellfish with high organic compounds. These valuable resources can't be further degraded.

Response: One of the most severe environmental stresses to the Gulf that the Commentor mentions is hypoxia, or

depressed dissolved oxygen. The Gulf of Mexico Program has identified excess nutrient loadings primarily of river discharge origin as the source of this over-enrichment. Nitrogen and phosphorus loading and organic material reaching the Gulf have increased dramatically in recent years. Scientists believe this over-enrichment causes excessive primary productivity in the form of algal blooms. Organic loadings from riverine sources coupled with the organic production within the Gulf exert massive biological oxygen demand. The result is an area of severely depressed oxygen levels in Gulf bottom waters that is increasing in size but varying seasonally. All major wastewater components of offshore operations (muds and cuttings, produced waters, and domestic wastewater) have oxygen consuming components. The domestic wastewater discharge from the sewage treatment facility yields organic wastes that exert a biological oxygen demand, but all of these wastes are negligible compared to the riverine and other coastal inputs. The estuarine hypoxia problems in Mobile and other bays, mentioned by the Commentor, is pronounced. The sediments of confined inland waters act as sinks for the nutrient and organic inputs. Wave action and currents plus the almost continual dredging activities within estuaries tend to increase the resuspension of these pollutants. While offshore supply boat traffic contributes turbidity, the industry collectively has little impact to this problem in the estuary.

Comment 128: Minimizing the impacts of effluent discharges by establishing limits in General Permits is certainly no solution to the problems. Dispersion of surface discharges into deeper waters is a deplorable practice. The only environmentally-friendly practice for discharging effluents into the sea can be the purification of the waste-water prior to discharge. Solids need to be disposed of separately on land. Dilution and dispersion are not solutions to pollution.

Response: EPA's goal and Congressional mandate per the Clean Water Act is to reduce pollution in the nation's waters. In order to achieve this mandate, EPA promulgates regulations, the effluent limitations guidelines, for all industrial sources, including the oil and gas industry. The effluent guidelines are implemented through the NPDES permitting process. In 1993, EPA promulgated effluent guidelines for the offshore subcategory of the oil and gas industry. During the process of developing these guidelines, EPA evaluated the treatment technologies as

well as disposal options available to the oil and gas industry.

NPDES permits require water quality-based analyses, and for marine dischargers, must include a CWA Section 403 "Ocean Discharge Criteria Evaluation (ODCE). The ODCE is a document published by EPA to evaluate the environmental impact of the NPDES general permit of discharges from the offshore oil and gas industry. The ODCE determined that the conditions and limitations in the general permit protected the water quality of the eastern Gulf of Mexico and preserved the health of the aquatic life.

For the offshore subcategory, treatment of produced water effluent using improved gas flotation and limitations on drilling fluid discharges were determined to be both economically achievable and providing significant reduction in pollutants compared to existing regulations. Therefore, treatment of effluent to municipal wastewater levels is not a currently feasible technologically nor economically. Disposing drilling solids on land was considered by EPA in 1993, but was determined not to be feasible for the offshore oil and gas industry given the large distances and costs associated with land disposal.

EPA agrees that dilution is not an appropriate method for treating discharges. However, the general permit does not rely on "the dilution of discharges to reduce the level of toxics" to avoid unreasonable degradation.

The conditions and limitations in the general permit for the eastern Gulf were determined to protect water quality and preserve the health of benthic and other marine organisms. These permit conditions and limitations include no discharge of free oil, no discharge of oil-based muds, no discharge of diesel oil, no discharge of produced sand, no discharge within 1,000 meters of areas of biological concern, oil and grease limitation on produced water, cadmium and mercury concentration limitation in barite, discharge rate limitations around live-bottom areas, and limitations on the whole effluent toxicity of both drilling fluids and produced water.

Comment 129: Estimates of dilution 100 meters from discharges and areas receiving drilling effluents at specified criteria or more can be generated in a form suitable for a general permit.

Response: While it is technically possible to construct a table of estimated dilutions for various operational and environmental parameters, EPA does not believe this approach offers any significant administrative or regulatory relief to operators and would require substantial Agency resources. EPA does

believe such an approach is an entirely feasible option for operators, given published criteria, should they decide they have an individual requirement, to further control their water quality impacts based on available environmental and operational data.

Comment 130: The proposed current speed of 4 cm/sec represents the median of data collected from offshore Alabama using a current meter placed at a 10 meter water depth in 30 meters of total water depth. EPA should evaluate the relevancy of this constant parameter, since the model will be applied to discharges in water depths for 200 meters or greater. This will result in more accurate projection of the effluent concentration at 100 meters (edge of mixing zone) which is used to calculate the toxicity limitations for each production platform modeled.

Response: EPA believes that Gulf currents at depths more than 200 meters deep are nil. The modeling performed relative to the issuance of new source performance standards and the revisions to best available technology evaluated the water currents in waters much shallower and under greater current magnitudes and fluctuations, representing worst case potential concentrations at the edge of a 100-meter mixing zone.

Comment 131: EPA should consider existing compliance levels in deciding whether to issue more NPDES permits.

Response: EPA regulations do not allow the Agency to consider an applicant's track record when deciding on new permits for a facility.

Comment 132: There should be a requirement for adequate emergency response.

Response: The MMS requires on-site containment capabilities as well as rapid response from shore bases.

Comment 133: EPA should consider the level of toxicity of the discharged material and should strongly consider a prohibition on toxic discharges.

Response: The effluent limitations prohibit toxic concentrations beyond a 100-meter zone of mixing.

Comment 134: The State of Florida must have the ability to opt for more stringent discharge conditions, if warranted, based on resources at a specific site. There must be a formal mechanism for State participation in general permit decisions.

Response: EPA is willing to enter into an agreement (Memorandum of Understanding) with the State of Florida regarding input to decisions on NPDES permitting review.

Other Changes to General Permit at the Time of Final Permit Issuance.

Based on comments received or review of draft permit, changes were made to the Fact Sheet and Permit as noted below prior to final issuance.

Fact Sheet Changes*Section 1.D(1)*

The Phrase "therefore sites where exploration has occurred are not considered existing sources", is changed to "therefore, sites where exploration has occurred are not considered new sources."

Section I.H

The phrase "one in Block 990 discharging approximately 160 BPD; and one in Block 821 discharging approximately 240 BPD." should be updated. Following this sentence, the Region has incorporated an update into the final Fact Sheet which reads as: Based on a 1998 survey, the Region gained information that Mobile Block 990 produced water discharge has increased to 450 BPD and Mobile Block 821 produced water has increased to 1500 BPD and incorporated this revised information in the Ocean Discharge Criteria Evaluation.

Section I.i

Cormix Expert System (v. 1.4; Doneker and Jirka, 1990) has been revised to use the most recent Cormix Model (Version 3.2). Since Brooks 4/3 power law is not used in the revised version of Cormix references using the Brooks 4/3 power law should also be deleted. The reference manual (EPA/600/4-85/013) was changed to (EPA/600/4-90/027F). The phrase "The LC 50s must be reported monthly, accompanied by a copy of the full laboratory report" is changed to "The LC50s must be reported bi-monthly, accompanied by a copy of the full laboratory report. The reference to using sheepshead minnows for conducting toxicity tests is changed to inland silverside.

Part III,—1st Paragraph,—the wastestream, "Uncontaminated Freshwater" was added and has been included in the final permit under "Miscellaneous Discharges".

Section V.N—Clarifications

End-of-Well Sample—The previous definition will not be changed as proposed, and can be located in the definition Section of the Final NPDES General Permit.

Permit Changes*Part I. Section A.1*

Added well workover and abandonment operations as a category of operations covered.

Part I. Section A.4

Under Notification Requirements, Item No. 4, 10 and Item No. 11 were revised based on regulations and to exempt initial photo-documentation for certain facilities. NCO requirements were changed from 30 days prior to placement to 30 days after placement. NCO requirements for produced water discharge was changed from within 30 days prior to initiation of produced water to within 90 days after initiation of produced water discharge.

Part I. Section B.3.b

The reference to Cormix1 (Version 1.4) is changed to Cormix (Version 3.2) The reference to (EPA/600/4-85/013) is changed to (EPA/600/4-90/027F). The phrase "The results for both species shall be reported on the monthly DMR" has been changed to "The results for both species shall be reported on the monthly DMR, once every 2-months.

Part II. Section D.3

Transfers reference Part I.A.3 has been changed to Part I.A.4. Tables 2 & 3—For the Discharge parameter for Produced Water, the Toxicity requirement was changed from once/month to once-every two months, and one species was changed from sheepshead minnows to inland silverside minnow.

Appendix A—The type of species was revised based on comments. EPA added another parameter that may be used in the CORMIX toxicity calculation and will be reported by the operator.

General Permit Table of Contents

Part I. Requirements for NPDES Permits

Section A. Permit Applicability and Coverage Conditions

1. Operations Covered
2. Operations Excluded
3. General Permit Applicability
4. Notification Requirements
5. Termination of Operations
6. Intent to be Covered by a Subsequent Permit

Section B. Effluent Limitations and Monitoring Requirements

1. Drilling Fluids
2. Drill Cuttings
3. Produced Water
4. Deck Drainage
5. Produced Sand
6. Well Treatment Fluids, Completion Fluids, and Workover Fluids
7. Sanitary Waste (Facilities Continuously Manned by 10 or More Persons)

8. Sanitary Waste (Facilities Continuously Manned by 9 or Fewer Persons or Intermittently by Any Number)
9. Domestic Waste
10. Miscellaneous Discharges (Desalination Unit Discharge, Blowout Preventer Fluid, Uncontaminated Ballast Water, Uncontaminated Bilge Water, Mud, Cuttings, and Cement at the Seafloor, Uncontaminated Seawater, Boiler Blowdown, Source Water and Sand, Uncontaminated Freshwater, Excess Cement Slurry and Diatomaceous Earth Filter Media)

Section C. Other Discharge Limitations

1. Floating Solids or Visible Foam
2. Halogenated Phenol Compounds
3. Dispersants, Surfactants, and Detergents
4. Rubbish, Trash, and Other Refuse
5. Areas of Biological Concern

Part II. Standard Conditions for NPDES Permits

Section A. Introduction and General Conditions

1. Duty to Comply
2. Penalties for Violations of Permit Conditions
3. Duty to Mitigate
4. Permit Flexibility
5. Toxic Pollutants
6. Civil and Criminal Liabilities
7. Oil and Hazardous Substance Liability
8. State Laws
9. Property Rights
10. Onshore or Offshore Construction
11. Severability
12. Duty to Provide Information

Section B. Proper Operation and Maintenance of Pollution Controls

1. Proper Operation and Maintenance
2. Need to Halt or Reduce not a Defense
3. Bypass of Treatment Facilities
4. Upset Conditions
5. Removed Substances

Section C. Monitoring and Records

1. Representative Sampling
2. Discharge Rate/Flow Measurements
3. Monitoring Procedures
4. Penalties for Tampering
5. Retention of Records
6. Record Contents
7. Inspection and Entry

Section D. Reporting Requirements

1. Planned Changes
2. Anticipated Noncompliance
3. Transfers
4. Monitoring Reports
5. Additional Monitoring by the Permittee
6. Averaging of Measurements
7. Twenty-four Hour Reporting
8. Other Noncompliance
9. Other Information
10. Changes in Discharges of Toxic Substances
11. Duty to Reapply
12. Signatory Requirements
13. Availability of Reports

Part III. Monitoring Reports and Permit Modification

Section A. Monitoring Reports
Section B. Permit Modification

Part IV. Test Procedures and Definitions

- Section A. Test Procedures
 1. Samples of Wastes

2. Drilling Fluids Toxicity Test
3. Static (Laboratory) Sheen Test
4. Visual Sheen Test
5. Produced Water Acute Toxicity Test
6. Retort Test

Section B. Definitions

Table 2. Effluent Limitations, Prohibitions, and Monitoring Requirements for the Eastern Gulf of Mexico NPDES General Permit (Existing Sources)

Table 3. Effluent Limitations, Prohibitions, and Monitoring Requirements for the Eastern Gulf of Mexico NPDES General Permit (New Sources)

Appendix A

Table A-1. CORMIX Input Parameters for Toxicity Limitation Calculation

Appendix B. Map identifying Areas of Biological Concern in the Central Planning Area.

Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq.), operators of lease blocks located in OCS Federal waters seaward of 200 meters in the Eastern Planning Area and seaward of the outer boundary of the territorial seas in the Central Planning Area with existing source or new source discharges originating from exploration or development and production operations are authorized to discharge to receiving waters in accordance with effluent limitations, monitoring requirements, and other conditions set forth in parts I, II, III, and IV hereof.

Operators of operating facilities within the proposed NPDES general permit area must submit written notification to the Regional Administrator, prior to discharge, that they intend to be covered by either the existing source general permit or the new source general permit (See part I.A.4). Upon receipt of notification of inclusion by the Regional Administrator, owners or operators requesting coverage are authorized to discharge under either the existing source or new source general permit. Operators of lease blocks within the general permit area who fail to notify the Regional Administrator of intent to be covered by this general permit are not authorized under the general permit to discharge pollutants from their potential new or existing source facilities. This permit does not apply to non-operational leases, i.e., those on which no discharge has taken place in 2 years prior to the effective date of the new general permits. EPA will not accept Notice of Intent (NOI's) from such leases, and these general permits will not cover such leases. Non-operational leases will lose general

permit coverage on the effective date of these new general permits.

This permit shall become effective at midnight, Eastern Standard Time, on November 16, 1998.

For operational facilities, coverage under the old general permit shall terminate on the effective of this permit, unless the owner/operator submits a notice of intent (NOI) to be covered within 60 days thereafter, or an application for an individual permit within 120 days thereafter. If an NOI is filed, coverage under the old general permit terminates upon receipt of notification of inclusion by letter from the Director of the Water Management Division, Region 4. If a permit application is filed, the old general permit terminates when a final action is taken on the application for an individual permit.

This permit and the authorization to discharge shall expire at midnight, Eastern Standard Time, on *October 31, 2003*.

Signed this 7th day of October, 1998.

John H. Hankinson, Jr.,

Regional Administrator, EPA Region 4.

Part I. Requirements for NPDES Permits

Section A. Permit Applicability and Coverage Conditions

1. Operations Covered

These permits establish effluent limitations, prohibitions, reporting requirements, and other conditions for discharges from oil and gas facilities engaged in production, field exploration, drilling, well completion, well workover and abandonment operations, and well treatment operations from potential new sources and existing sources.

The permit coverage area includes Federal waters in the Gulf of Mexico seaward of the 200 meter water depth for offshore Alabama and Florida in the Eastern Planning Area, and seaward of the outer boundary of the territorial seas for offshore Mississippi and Alabama in the Central Planning Area. This permit only covers facilities located in and discharging to the Federal waters listed above and does not authorize discharges from facilities in or discharging to the territorial sea (within 3 miles of shore) of the Gulf coastal states or from facilities defined as "coastal" or "onshore" (see 40 CFR, part 435, subparts C and D).

2. Operations Excluded

Any operator who seeks to discharge drill fluids, drill cuttings or produced water within 1000 meters of an area of biological concern is ineligible for

coverage under these general permits and must apply for an individual permit.

Any operator with leases occurring below the 26° parallel which are currently under moratorium are excluded from inclusion under these general permits.

No coverage will be extended under either of the new general permits to non-operational leases.

3. General Permit Applicability

In accordance with 40 CFR 122.28(b)(3) and 122.28(c), the Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:

(a) The discharge(s) is a significant contributor of pollution;

(b) The discharger is not in compliance with the conditions of this permit;

(c) A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point sources;

(d) Effluent limitation guidelines are promulgated for point sources covered by this permit;

(e) A Water Quality Management Plan containing requirements applicable to such point source is approved;

(f) It is determined that the facility is located in an area of biological concern.

(g) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

The Regional Administrator may require any operator authorized by this permit to apply for an individual NPDES permit only if the operator has been notified in writing that a permit application is required. Any operator authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The operator shall submit an application together with the reasons supporting the request to the Regional Administrator no later than 180 days before an activity is scheduled to commence on the lease block. When an individual NPDES permit is issued to an operator otherwise subject to this permit, the applicability of this permit to the owner or operator is automatically terminated on the effective date of the individual permit.

A source excluded from coverage under this general permit solely because it already has an individual permit may request that its individual permit be

revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source after the notification of intent to be covered is filed (see I.A.4, below).

4. Notification Requirements (Existing Sources and New Sources)

Written notification of intent (NOI) to be covered in accordance with the general permit requirements shall state whether the permittee is requesting coverage under the existing source general permit or new source general permit, and shall contain the following information:

(1) The legal name and address of the owner or operator;

(2) The facility name and location, including the lease block assigned by the Department of Interior, or if none, the name commonly assigned to the lease area;

(3) The number and type of facilities and activity proposed within the lease block;

(4) The waters into which the facility is or will be discharging; including a map with longitude and latitude of current or proposed outfall locations. Current produced water discharges shall also include Appendix A.

(5) The date on which the owner/operator commenced on-site construction, including:

(a) Any placement assembly or installation of facilities or equipment; or

(b) The clearing, excavation or removal of existing structures or facilities;

(6) The date on which the facility commenced exploration activities at the site;

(7) The date on which the owner/operator entered into a binding contract for the purchase of facilities or equipment intended to be used in its operation within a reasonable time (if applicable);

(8) The date on which the owner/operator commenced development; and

(9) The date on which the owner/operator commenced production.

(10) Technical information on the characteristics of the sea bottom within 1000 meters of the discharge point, including but not limited to information regarding geohazards (Notice To Lessees 88-3, Outer Continental Shelf Shallow Hazards Requirements for the Gulf of Mexico OCS Region dated September 7, 1983), topographical formations, live bottom, and chemosynthetic communities.

(11) MMS photo documentation survey according to most current MMS guidelines, (Revised Guidelines for Photodocumentation Surveys dated

January 31, 1989), for facilities in less than 100 meters water depth in the Central Planning Area. (Exception: Current active discharging facilities on the effective date of the new general permit will be exempt from photo-documentation surveys for the life of that discharge: (Refer to Comment No. 69 for clarification)

All notices of intent shall be signed in accordance with 40 CFR § 122.22.

EPA will act on the NOI in a reasonable period of time.

For operating leases, the NOI shall be submitted within sixty (60) days after publication of the final determination on this action. Non-operational facilities are not eligible for coverage under these new general permits. No NOI will be accepted from either a non-operational or newly acquired lease until such time as an exploration plan or development production plan has been prepared for submission to EPA. Operators obtaining coverage under the existing source general permit for exploration activities must send a new NOI for coverage of development and production activities under the new source general permit sixty (60) days prior to commencing such operations. All NOI's requesting coverage should be sent by certified mail to: Director, Water Management Division, Surface Water Permits & Facilities Branch, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

For drilling activity, the operator shall submit a Notice to Drill (NTD) sixty (60) days prior to the actual move-on date. This NTD shall contain: (1) the assigned NPDES general permit number assigned to the lease block, (2) the latitude and longitude of the proposed discharge point, (3) the water depth, and (4) the estimated length of time the drilling operation will last. This NTD shall be submitted to Region 4 at the address above, by certified mail to: Director, Water Management Division, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

In addition, a notice of commencement of operations (NCO) is required to be submitted for each of the following activities: placing a production platform in the general permit coverage area (within 30 days after to placement); and discharging waste water within the coverage area (within 90 days after initiation of produced water discharges). The NCO required for discharging waste water shall be accompanied by the information requested in Appendix A for calculation of the toxicity limitation for produced water discharges. Within ninety (90) days after produced water

discharge begins, the permittee shall perform adequate tests to establish a bbl/day estimate to be used in the Cormix model. This information must then be provided to EPA in the Notice of Commencement of Operations for produced water discharges.

All NOIs, NTDs, NCOs, and any subsequent reports required under this permit shall be sent by certified mail to the following address: Director, Water Management Division, Surface Water Permits Section, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

5. Termination of Operations

Lease block operators shall notify the Director (at the address above) within 60 (sixty) days after the permanent termination of discharges from their facility.

6. Intent To Be Covered by a Subsequent Permit

This permit shall expire on *October 31, 2003*. However, an expired general permit continues in force and effect until a new general permit is issued. Lease block operators authorized to discharge by this permit shall by certified mail notify the Director, Water Management Division, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960, on or before April 30, 2003, that they intend to be covered by a permit that will authorize discharge from these facilities after the termination date of this permit on October 31, 2003.

Permittees must submit a new NOI in accordance with the requirements of this permit to remain covered under the continued general permit after the expiration of this permit. Therefore, facilities that have not submitted an NOI under the permit by the expiration date cannot become authorized to discharge under any continuation of this NPDES general permit. All NOI's from permittees requesting coverage under a continued permit should be sent by certified mail to: Director, Water Management Division, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

Section B. Effluent Limitations and Monitoring Requirements

1. Drilling Fluids

The discharge of drilling fluids shall be limited and monitored by the permittee as specified in both tables and below.

Note: The permit prohibitions and limitations that apply to drilling fluids, also apply to fluids that adhere to drill cuttings. Any permit condition that applies to the

drilling fluid system, therefore, also applies to cuttings discharges.

(a) Prohibitions. Oil-Based Drilling Fluids. The discharge of oil-based drilling fluids and inverse emulsion drilling fluids is prohibited.

Oil-Contaminated Drilling Fluids. The discharge of drilling fluids to which waste engine oil, cooling oil, gear oil or any lubricants which have been previously used for purposes other than borehole lubrication have been added, is prohibited.

Diesel Oil. Drilling fluids to which any diesel oil has been added as a lubricant or pill may not be discharged.

No Discharge Near Areas of Biological Concern. For those facilities within 1000 meters of an area of biological concern the discharge of drilling fluids is not allowed.

(b) Limitations. Mineral Oil. Mineral oil may be used only as a lubricity additive or pill. If mineral oil is added to a water-based drilling fluid, the drilling fluid may not be discharged unless the 96-hr LC50 of the drilling fluid is greater than 30,000 ppm SPP and it passes the static sheen test for free oil.

Cadmium and Mercury in Barite. There shall be no discharge of drilling fluids to which barite has been added if such barite contains mercury in excess of 1.0 mg/kg (dry weight) or cadmium in excess of 3.0 mg/kg (dry weight).

The permittee shall analyze a representative sample of each supply of stock barite prior to drilling each well and submit the results for total mercury and cadmium in the Discharge Monitoring Report (DMR). If more than one well is being drilled at a site, new analyses are not required for subsequent wells, provided that no new supplies of barite have been received since the previous analysis. In this case, the results of the previous analysis should be used for completion of the DMR.

Alternatively, the permittee may provide certification, as documented by the supplier(s), that the barite being used on the well will meet the above limits. The concentration of the mercury and cadmium in the barite shall be reported on the DMR as documented by the supplier.

Analyses shall be conducted by absorption spectrophotometry (see 40 CFR Part 136, flame and flameless AAS) and the results expressed in mg/kg (dry weight).

Toxicity. Discharged drilling fluids shall meet both a daily minimum and a monthly average minimum effluent toxicity limitation of at least 30,000 ppm, (v/v) of a 9:1 seawater:mud suspended particulate phase (SPP)

based on a 96-hour test using *Mysidopsis bahia*. The method is published in the final effluent guidelines at 58 FR 12507. Monitoring shall be performed at least once per month for both the daily minimum and the monthly average minimum. In addition, an end-of-well sample is required (see definitions). The type of sample required is a grab sample, taken from beneath the shale shaker. Results of toxicity tests must be reported on the monthly DMRs. Copies of the laboratory reports also must be submitted with the DMRs.

Free Oil. No free oil shall be discharged. Monitoring shall be performed prior to discharges and on each day of discharge using the static (laboratory) sheen test method in accordance with the method provided in Part IV.A.3, as published in the final effluent guidelines (58 FR 12506). The discharge of drilling fluids that fail the static sheen test is prohibited. The results of each sheen test must be recorded and the number of observations of a sheen must be reported on each monthly DMR.

Maximum Discharge Rate. All facilities are subject to a maximum discharge rate of 1,000 barrels per hour. Discharge rates must be recorded and the hourly discharge rate reported on the monthly DMR in barrels/hour.

(c) Monitoring Requirements. In addition to the above limitations, the following monitoring and reporting requirements also apply to drilling fluids discharges.

Drilling Fluids Inventory. The permittee shall maintain a precise chemical inventory of all constituents and their total volume or mass added downhole for each well. Information shall be recorded but not reported unless specifically requested by EPA.

Volume. Once per month, the total monthly volume (bbl/month) of discharged drilling fluids must be estimated and recorded. The volume shall be reported on the monthly DMR.

Oil Content. There is no numeric limitation on the oil content of discharged drilling muds (except that muds containing any waste oil, or diesel oil as a lubricity agent shall not be discharged). However, note that the oil added shall not cause a violation of either the toxicity or free oil limitations discussed above.

All discharged drilling fluids, including those fluids adhering to cuttings must meet the limitations of this section except that discharge rate limitations do not apply before installation of the marine riser.

2. Drill Cuttings

The discharge of drill cuttings shall be limited and monitored by the permittee as specified in both tables and below.

Note: The permit prohibitions and limitations that apply to drilling fluids also apply to fluids that adhere to drill cuttings. Any permit condition that applies to the drilling fluid system, therefore, also applies to cuttings discharges. Monitoring requirements, however, may not be the same.

(a) Prohibitions. Cuttings from Oil-Based Drilling Fluids. Prohibitions that apply to drilling fluids, set forth above in B.1(a), also apply to drill cuttings. Therefore, the discharge of cuttings is prohibited when they are generated while using an oil-based or invert emulsion mud.

Cuttings from Oil Contaminated Drilling Fluids. The discharge of cuttings that are generated using drilling fluids that contain waste engine oil, cooling oil, gear oil or any lubricants which have been previously used for purposes other than borehole lubrication is prohibited.

Cuttings generated using drilling fluids which contain diesel oil. Drill cuttings generated using drilling fluids to which any diesel oil has been added as a lubricant may not be discharged.

Cuttings generated using mineral oil. The discharge of cuttings generated using drilling fluids which contain mineral oil is prohibited except when the mineral oil is used as a carrier fluid (transporter fluid), lubricity additive, or pill.

No Discharge Near Areas of Biological Concern. For those facilities within 1000 meters of an area of biological concern discharge of drilling cuttings is not allowed.

(b) Limitations. Mineral Oil. Limitations that apply to drilling fluids also apply to drill cuttings. Therefore, if mineral oil pills or mineral oil lubricity additives have been introduced to a water-based mud system, cuttings may be discharged if they meet the limitations for toxicity and free oil.

Free Oil. No free oil shall be discharged. Monitoring shall be performed prior to bulk discharges and on each day of discharge using the static (laboratory) sheen test method in accordance with the method provided in Part IV.A.3. The discharge of cuttings that fail the static sheen test is prohibited. The results of each sheen test must be recorded and the number of observations of a sheen must be reported on each monthly DMR.

Toxicity. Discharged cuttings generated using drilling fluids with a daily minimum or a monthly average minimum 96-hour LC50 of less than

30,000 ppm, (v/v) of a 9:1 seawater to drilling fluid suspended particulate phase (SPP) volumetric ratio using *Mysidopsis bahia* shall not be discharged.

(c) Monitoring Requirements. Volume. Once per month, the monthly total discharge must be estimated and recorded. The estimated volume of cuttings discharged (bbl/month) shall be reported on the DMR.

3. Produced Water

The discharge of produced water shall be limited and monitored by the permittee as specified in both tables and below.

(a) Prohibitions. No Discharge Near Areas of Biological Concern. For those facilities within 1000 meters of an area of biological concern discharge of produced water is not allowed.

(b) Limitations. Oil and Grease. Produced water discharges must meet both a daily maximum limitation of 42 mg/l and a monthly average limitation of 29 mg/l for oil and grease. A grab sample must be taken at least once per month. The daily maximum samples may be based on the average concentration of four grab samples taken within the 24-hour period. If only one sample is taken for any one month, it must meet both the daily and monthly limits. If more samples are taken, they may exceed the monthly average for any one day, provided that the average of all samples taken meets the monthly limitation. The gravimetric method is specified at 40 CFR part 136. The highest daily oil and grease concentration and the monthly average concentration shall be reported on the monthly DMR.

Toxicity. Produced water discharges must meet a toxicity limitation projected to be the limiting permissible concentration (0.01 x LC50) at the edge of a 100-meter mixing zone. The toxicity limitation will be calculated by EPA based on each facility's site-specific water column conditions and discharge configuration. The methods for this determination are presented in Appendix A of this permit using the Cornell Mixing Zone Expert System (CORMIX). The CORMIX (Version 3.2), which is explained in Chapter 4, Section 4.4 of the Ocean Discharge Criteria Evaluation will be used to evaluate the toxicity of the produced water outfalls.

Compliance with the toxicity limitation shall be demonstrated by conducting 96-hour toxicity tests each month using *Mysidopsis bahia* and inland silverside minnow. The method is published in "Methods for Measuring the Acute Toxicity of Effluents to

Freshwater and Marine Organisms" (EPA/600/4-90/027F). The results for both species shall be reported on the monthly DMR, once every two months. The operator shall also submit a copy of all laboratory reports with the DMR.

(c) Monitoring Requirements. Flow. Once per month, an estimate of the total flow (bbl/month) must be reported on the DMR.

4. Deck Drainage

The discharge of deck drainage shall be limited and monitored by the permittee as specified in both tables and below.

(a) Limitations. Free Oil. No free oil shall be discharged. Monitoring shall be performed on each day of discharge using the visual sheen test method in accordance with the method provided at Part IV.A.4. The discharge of deck drainage that fails the visual sheen test is prohibited. The results of each sheen test must be recorded and the number of observations of a sheen must be reported on each monthly DMR.

(b) Monitoring Requirements. Volume. Once per month, the monthly total discharge (bbls/month) must be estimated and reported on the DMR.

5. Produced Sand

The discharge of produced sand is prohibited under this general permit. Wastes must be hauled to shore for treatment and disposal.

6. Well Treatment Fluids, Completion Fluids, and Workover Fluids

The discharge of well treatment fluids, completion fluids, and workover fluids shall be limited and monitored by the permittee as specified in both tables and below.

(a) Limitations. Free Oil. No free oil shall be discharged. Monitoring shall be performed prior to discharge and on each day of discharge using the static (laboratory) sheen test method in accordance with the method provided at Part IV.A.3. The discharge of well treatment, completion, or workover fluids that fail the static sheen test is prohibited. The results of each sheen test must be recorded and the number of observations of a sheen must be reported on each monthly DMR.

Oil and Grease. Well treatment fluids, completion fluids, and workover fluids discharges must meet both a daily maximum of 42 mg/l and a monthly average of 29 mg/l limitation for oil and grease. A grab sample must be taken at least once per month when discharging. The daily maximum concentration may be based on the average of four grab samples taken within the 24-hour period. If only one sample is taken for

any one month, it must meet both the daily and monthly limits. If more samples are taken, they may exceed the monthly average for any one day, provided that the average of all samples taken meets the monthly limitation. The analytical method is the gravimetric method, as specified at 40 CFR part 136.

Priority Pollutants. For well treatment fluids, completion fluids, and workover fluids, the discharge of priority pollutants is prohibited except in trace amounts. Information on the specific chemical composition of any additives containing priority pollutants shall be recorded.

Note: If materials added downhole as well treatment, completion, or workover fluids contain no priority pollutants, the discharge is assumed not to contain priority pollutants except possibly in trace amounts.

(b) Monitoring Requirements. Volume. Once per month, an estimate of the total volume discharged (bbls/month) shall be reported on the DMR.

7. Sanitary Waste (Facilities Continuously Manned by 10 or More Persons)

The discharge of sanitary waste shall be limited and monitored by the permittee as specified in both tables and below.

(a) Prohibitions. Solids. No floating solids may be discharged. Observations must be made once per day, during daylight in the vicinity of sanitary waste outfalls, following either the morning or midday meals and at the time during maximum estimated discharge. The number of days solids are observed shall be recorded.

(b) Limitations. Residual Chlorine. Total residual chlorine is a surrogate parameter for fecal coliform. Discharges of sanitary waste must contain a minimum of 1 mg residual chlorine/l and shall be maintained as close to this concentration as possible. The approved analytical method is Hach CN-66-DPD. A grab sample must be taken once per month and the concentration reported.

(Exception) Any facility which properly maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under Section 312 of the Act shall be deemed in compliance with permit limitations for sanitary waste. The MSD shall be tested annually for proper operation and the test results maintained at the facility. The operator shall indicate use of an MSD on the monthly DMR.

(c) Monitoring Requirements. Flow. Once per month, the average flow (MGD) must be estimated and recorded for the flow of sanitary wastes.

8. Sanitary Waste (Facilities Continuously Manned by 9 or Fewer Persons or Intermittently by Any Number).

The discharge of sanitary waste shall be limited and monitored by the permittee as specified in both tables and below.

(a) Prohibitions. Solids. No floating solids may be discharged to the receiving waters. An observation must be made once per day when the facility is manned, during daylight in the vicinity of sanitary waste outfalls, following either the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed shall be recorded.

(Exception) Any facility which properly maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under Section 312 of the Act shall be deemed in compliance with permit limitations for sanitary waste. The MSD shall be tested annually for proper operation and the test results maintained at the facility. The operator shall indicate use of an MSD on the monthly DMR.

9. Domestic Waste. The discharge of domestic waste shall be limited and monitored by the permittee as specified in both tables and below.

(a) Prohibitions. Solids. No floating solids shall be discharged. In addition, food waste, comminuted or not, may not be discharged within 12 nautical miles from nearest land.

(b) Limitations. Solids. Comminuted food waste which can pass through a 25-mm mesh screen (approximately 1 inch) may be discharged 12 or more nautical miles from nearest land.

(c) Monitoring Requirements. Solids. An observation must be made during daylight in the vicinity of domestic waste outfalls following either the morning or midday meal and at a time during maximum estimated discharge. The number of days solids are observed must be recorded.

10. Miscellaneous Discharges. Desalination Unit Discharge; Blowout Preventer Fluid; Uncontaminated Ballast Water; Uncontaminated Bilge Water; Mud, Cuttings, and Cement at the Seafloor; Uncontaminated Seawater; Boiler Blowdown; Source Water and Sand; Uncontaminated Freshwater, Excess Cement Slurry, Diatomaceous Earth Filter Media.

The discharge of miscellaneous discharges shall be limited and monitored by the permittee as specified in both tables and below.

(a) Limitations. Free Oil. No free oil shall be discharged. Monitoring shall be

performed using the visual sheen test method once per day when discharging on the surface of the receiving water or by use of the static sheen method at the operator's option. Both tests shall be conducted in accordance with the methods presented at IV.A.3 and IV.A.4. Discharge is limited to those times that a visual sheen observation is possible. The number of days a sheen is observed must be recorded.

(Exception): Miscellaneous discharges may be discharged from platforms that are on automatic purge systems without monitoring for free oil when the facility is not manned. Discharge is not restricted to periods when observation is possible; however, the static (laboratory) sheen test method must be used during periods when observation of a sheen is not possible, such as at night or during inclement conditions. Static sheen testing is not required for miscellaneous discharges occurring at the sea floor.

Section C. Other Discharge Limitations

1. Floating Solids or Visible Foam

There shall be no discharge of floating solids or visible foam from any source other than in trace amounts.

2. Halogenated Phenol Compounds

There shall be no discharge of halogenated phenol compounds as a part of any waste streams authorized in this permit.

3. Dispersants, Surfactants, and Detergents

The facility operator shall minimize the discharge of dispersants, surfactants, and detergents except as necessary to comply with the safety requirements of the Occupational Safety and Health Administration and MMS. This restriction applies to tank cleaning and other operations which do not directly involve the safety of workers. The restriction is imposed because detergents disperse and emulsify oil, potentially increasing toxic impacts and making the detection of a discharge of free oil more difficult.

4. Rubbish, Trash, and Other Refuse

The discharge of any solid material not authorized in the permit (as described above) is prohibited.

This permit includes limitations set forth by the U.S. Coast Guard in regulations implementing Annex V of MARPOL 73/78 for domestic waste disposal from all fixed or floating offshore platforms and associated vessels engaged in exploration or exploitation of seabed mineral resources (33 CFR 151). These limitations, as specified by Congress (33 U.S.C. 1901,

the Act to Prevent Pollution from Ships), apply to all navigable waters of the United States.

This permit prohibits the discharge of "garbage" including food wastes, within 12 nautical miles from nearest land. Comminuted food waste (able to pass through a screen with a mesh size no larger than 25 mm, approx. 1 inch) may be discharged when 12 nautical miles or more from land. Graywater, drainage from dishwater, shower, laundry, bath, and washbasins are not considered garbage within the meaning of Annex V. Incineration ash and non-plastic clinkers that can pass through a 25-mm mesh screen may be discharged beyond 3 miles from nearest land. Otherwise, ash and non-plastic clinkers may be discharged beyond 12 nautical miles from nearest land.

5. Areas of Biological Concern

There shall be no discharge of drilling muds, drill cuttings and produced water within 1000 meters of Areas of Biological Concern. If at any time it is determined that a facility is located within 1000 meters of an area of biological concern, the operator shall immediately cease discharge from these outfalls in the area and shall file an application for an individual permit as provided in 40 CFR 122.28(b)(3). The operator may not resume discharging from these outfalls until an individual permit has been issued.

Part II. Standard Conditions for NPDES Permits

Section A. Introduction and General Conditions

In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES permits set forth in the Clean Water Act, as amended, as well as ALL applicable regulations.

1. Duty To Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action or for requiring a permittee to apply and obtain an individual NPDES permit.

2. Penalties for Violations of Permit Conditions—33 USC § 1319(c)

(a) Criminal Penalties. (1) Negligent Violations. The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less \$2,500 nor more than \$25,000

per day of violation, or by imprisonment for not more than 1 year, or both.

(2) **Knowing Violations.** The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

(3) **Knowing Endangerment.** The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000 per day of violation for individuals or up to \$1 million for organizations, or by imprisonment for not more than 15 years, or both.

(4) **False Statements.** The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309(c) of the Clean Water Act).

(b) **Civil Penalties—33 USC § 1319(d).** The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for such violation. A single operational upset which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation.

(c) **Administrative Penalties.** The Act at Section 309 allows that the Regional Administrator may assess a Class I or Class II civil penalty for violations of Sections 301, 302, 306, 307, 318, or 405 of the Act. A Class I penalty may not exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000. A Class II penalty may not exceed \$10,000 per day for each day during which the violation continues except that the maximum amount shall not

exceed \$125,000. An upset that leads to violations of more than one pollutant parameter will be treated as a single violation.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Permit Flexibility

These permits may be modified, revoked and reissued for the causes set forth at 40 CFR § 122.62. The permits may be terminated for the following reasons (see 40 CFR 122.62):

(a) Violation of any terms or conditions of this permit;

(b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

(c) A change in any condition that requires either a temporary or a permanent reduction or elimination of the authorized discharge; or

(d) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

5. Toxic Pollutants

Notwithstanding Part II.A.4, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" and "Upsets" (see II.B.3 and II.B.4), nothing

in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance with permit conditions. Any false or misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable CFR regulations, which avoids or effectively defeats the regulatory purpose of the permit may subject the permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

9. Property Rights

The issuance of this permit does not convey any property rights of any sort, any exclusive privileges, authorize any injury to private property, any invasion of personal rights, nor any infringement of Federal, state, or local laws or regulations.

10. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structure of facilities or the undertaking of any work in any waters of the United States.

11. Severability

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

12. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The

permittee shall also furnish to the Regional Administrator upon request, copies of records required to be kept by this permit.

Section B. Proper Operation and Maintenance of Pollution Controls

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

2. Need To Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

(a) Definitions. (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.3(c) and 3(d) below.

(c) Notice. (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall, submit notice of an unanticipated bypass as required in Section D.7 (24-hour reporting).

(d) Prohibition of bypass. (1) Bypass is prohibited and the Regional Administrator may take enforcement

action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required under Section B.3(c).

(2) The Regional Administrator may approve an anticipated bypass after considering its adverse effects, if the Regional Administrator determines that it will meet the three conditions listed above in Section B.3(d)(1).

4. Upset Conditions

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an Upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.4(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions Necessary for a Demonstration of Upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required by Section D.7 below; and,

(4) The permittee complied with any remedial measures required by Section A.3, above.

(d) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters. Any substance specifically listed within this permit may be discharged in accordance with specified conditions, terms, or limitations.

Section C. Monitoring and Records

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Discharge Rate/Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected, maintained, and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than $\pm 10\%$ from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit in Part IV, below.

4. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or imprisonment for not more than 2 years, or both.

5. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit for a period of at least 3 years from the date of the sample, measurement, or report. This period may be extended by request of the Regional Administrator at any time. The operator shall maintain records at development and production facilities for 3 years, wherever practicable and at a specific shore-based site whenever not practicable.

6. Record Contents

Records of monitoring information shall include:

- (a) The date, exact place, and time of sampling or measurements;
- (b) The individual(s) who performed the sampling or measurements;
- (c) The date(s) analyses were performed;
- (d) The individual(s) who performed the analyses;
- (e) The analytical techniques or methods used; and
- (f) The results of such analyses.

7. Inspection and Entry

The permittee shall allow the Regional Administrator or an authorized representative, upon the presentation of credentials and other documents as may be required by the law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

Section D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (a) The alteration or addition to a facility permitted under the existing source general permit may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b) (58 FR 12454; final effluent guidelines for the offshore subcategory); or

(b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (48 FR 14153, April 1, 1963, as amended at 49 FR 38049, September 26, 1984).

2. Anticipated Noncompliance

The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person. Any new owner or operator shall submit a notice of intent to be covered under this general permit according to procedures presented at Part I.A.4.

4. Monitoring Reports

See Part III.A of this permit.

5. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased monitoring frequency also shall be indicated on the DMR.

6. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.

7. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment (this includes any spill that requires reporting to the state regulatory authority). Information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and, steps taken or planned to

reduce, eliminate, and prevent recurrence of the noncompliance. The director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

- (a) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (b) Any upset which exceeds any effluent limitation in the permit;
- (c) Violations of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II of the permit to be reported within 24 hours.

The reports should be made to Region 4 by telephone at (404) 562-9746. The Regional Administrator may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part II.D.7 at the time monitoring reports are submitted. The reports shall contain the information listed at II.D.7.

9. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, it shall promptly submit such facts or information.

10. Changes in Discharges of Toxic Substances

For any toxic pollutant that is not limited in this permit, either as an additive itself or as a component in an additive formulation, the permittee shall notify the Regional Administrator as soon as he knows or has reason to believe that:

- (a) Any activity has occurred or will occur which would result in the discharge of such toxic pollutants on a routine or frequent basis, if that discharge will exceed the highest of the "notification levels" described at 40 CFR 122.42(a)(1)(i) and (ii);
- (b) Any activity has occurred or will occur which would result in any discharge of such toxic pollutants on a non-routine or infrequent basis, if that discharge will exceed the highest of the "notification levels" described at 40 CFR 122.42(a)(2)(i) and (ii).

11. Duty To Reapply

If the permittee wishes to continue an activity regulated by this permit after

the expiration date of this permit, the permittee must submit an NOI to be covered or must apply for a new permit. Continuation of expiring permits shall be governed by regulations at 40 CFR Part 122.6 and any subsequent amendments.

12. Signatory Requirements

All NOIs, applications, reports, or information submitted to the Director shall be signed and certified as required at 40 CFR 122.22.

(a) All permit applications shall be signed as follows: (1) For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(ii) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship—by a general partner or the proprietor, respectively.

(b) Authorized Representative. All reports required by the permit and other information requested by the Regional Administrator shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Regional Administrator.

(c) Changes to Authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new

authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or application to be signed by an authorized representative.

(d) Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

13. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the Regional Office. As required by the Act, the name and address of any permit applicant or permittee, permit applications, permits, and effluent data shall not be considered confidential.

Part III. Monitoring Reports and Permit Modification

Section A. Monitoring Reports

The operator of each lease block shall be responsible for submitting monitoring results for each facility within each lease block. If there is more than one facility in each lease block (platform, drilling ship, semi-submersible), the discharge shall be designated in the following manner: 101 for the first facility; 201 for the second facility; 301 for the third facility, etc.

Monitoring results obtained for each month shall be summarized for that month and reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed calendar month. (For example, data for January shall be submitted by February 28.) Signed copies of these and all other reports required by Part II.D shall be submitted to the following address: Director, Water Management Division, Clean Water Act Enforcement Section, U.S. EPA, Region 4, Atlanta Federal Center, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960.

All laboratory reports submitted with DMRs should clearly indicate the permit

number, outfall number, and any other identification information necessary to associate the report with the correct facility, waste stream, and outfall.

If no discharge occurs during the reporting period, sampling requirements of this permit do not apply. The statement "No Discharge" shall be written on the DMR form. If, during the term of this permit, the facility ceases discharge to surface waters, the Regional Director shall be notified (at the address above) within 60 (sixty) days after the permanent termination of discharges from their facility. This notification shall be in writing.

Section B. Permit Modification

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation, or sludge disposal requirement issued or approved under sections 301(b)(2)(C) and (D), 307(a)(2), and 405(d)(2)(D) of the Act, as amended, if the effluent standard or limitation, or sludge disposal requirement so issued or approved:

(a) Contains different conditions or is otherwise more stringent than any conditions in the permit; or

(b) Controls any pollutant or disposal method not addressed in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

Part IV. Test Procedures and Definitions

Section A. Test Procedures

1. Samples of Wastes

If requested, the permittee shall provide EPA with a sample of any waste in a manner specified by the Agency.

2. Drilling Fluids Toxicity Test

The approved sampling and test methods for permit compliance are provided in the final effluent guidelines published at 58 FR 12507 on March 4, 1993 as Appendix 2 to Subpart A of Part 435.

3. Static (Laboratory) Sheen Test

The approved sampling and test methods for permit compliance are provided in the final effluent guidelines published at 58 FR 12506 on March 4, 1993 as Appendix 1 to Subpart A.

4. Visual Sheen Test

The visual sheen test is used to detect free oil by observing the surface of the receiving water for the presence of a sheen while discharging. A sheen is defined as a "silvery" or "metallic"

sheen, gloss, or increased reflectivity; visual color; iridescence; or oil slick on the surface (see 58 FR 12507). The operator must conduct a visual sheen test only at times when a sheen could be observed. This restriction eliminates observations at night or when atmospheric or surface conditions prohibit the observer from detecting a sheen (e.g., during rain or rough seas, etc.). Certain discharges can only occur if a visual sheen test can be conducted.

The observer must be positioned on the rig or platform, relative to both the discharge point and current flow at the time of discharge, such that the observer can detect a sheen should it surface down current from the discharge. For discharges that have been occurring for at least 15 minutes previously, observations may be made any time thereafter. For discharges of less than 15 minutes duration, observations must be made both during discharge and 5 minutes after discharge has ceased.

5. Produced Water Acute Toxicity Test

The method for determining the 96-hour LC50 for effluents is published in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" (EPA/600/4-90/027F). The species to be used for compliance testing for this permit are *Mysidopsis bahia* and inland silverside minnows (*Menidia beryllina*)

Section B. Definitions

1. *Act* means the Clean Water Act (CWA), as amended (33 U.S.C. 1251 et. seq.).

2. *Administrator* means the Administrator of EPA, Region 4, or an authorized representative.

3. *Areas of Biological Concern* for waters within the territorial seas (shoreline to 3-miles offshore) are those defined as "no activity zones" for biological reasons by the states of Alabama, Florida or Mississippi. For offshore waters seaward of three miles, areas of biological concern include "no activity zones" defined by the Department of the Interior (DOI) for biological reasons, or identified by EPA in consultation with the DOI, the states, or other interested federal agencies, as containing biological communities, features or functions that are potentially sensitive to discharges associated with the oil and gas industry. Areas of Biological Concern include, but are not limited to, the following: Southwest Rock (30 06.1'N, 88 12.3'W), Southeast Banks (30 00.9'N; 87 57.1'W); 17 Fathom Hole (29 55.6'N 88 03.4'W) and lease blocks with Pinnacle Trend Features. These areas are geographically and in greater detail in Appendix B. EPA may,

from time to time, identify additional Areas of Biological Concern.

4. *Applicable Effluent Standards and Limitations* means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.

5. *Average Daily Discharge Limitation* means the highest allowable average of discharges over a 24-hour period, calculated as the sum of all discharges or concentrations measured divided by the number of discharges or concentrations measured that day.

6. *Average Monthly Discharge Limitation* means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of discharges measured that month. The limitation may be the average of discharge rates or concentrations.

7. *Batch or Bulk Discharge* is any discharge of a discrete volume or mass of effluent from a pit, tank, or similar container that occurs on a one-time, infrequent, or irregular basis.

8. *Blowout-Out Preventer Control Fluid* means fluid used to actuate the hydraulic equipment on the blow-out preventer or subsea production wellhead assembly.

9. *Boiler Blowdown* means discharges from boilers necessary to minimize solids build-up in the boilers, including vents from boilers and other heating systems.

10. *Bulk Discharge* means any discharge of a discrete volume or mass of effluent from a pit tank or similar container that occurs on a one-time, infrequent, or irregular basis.

11. *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

12. *Clinkers* are small lumps of residual material left after incineration.

13. *Completion Fluids* are salt solutions, weighted brines, polymers and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production. These fluids move into the formation and return to the surface as a slug with the produced water. Drilling muds remaining in the wellbore during logging, casing, and cementing operations or during temporary abandonment of the well are not considered completion fluids and are regulated by drilling fluids requirements.

14. *Daily Average Discharge* (also known as monthly average) limitations means the highest allowable average daily discharge(s) over a calendar month, calculated as the sum of all daily discharge(s) measured during a calendar month divided by the number of daily discharge(s) measured during that month.

15. *Daily Discharge* means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant or waste stream discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the average (weighted by flow value) of all samples collected during that sampling day.

16. *Daily Maximum discharge* limitations are the highest allowable daily discharge rate or concentration measured during a calendar day.

17. *Deck Drainage* is all waste resulting from platform washings, deck washings, deck area spills, equipment washings, rainwater, and runoff from curbs, gutters, and drains, including drip pans and wash areas.

18. *Desalination Unit Discharge* means waste water associated with the process of creating freshwater from seawater.

19. *Development Drilling* means the drilling of wells required to efficiently produce a hydrocarbon formation or formations.

20. *Diatomaceous Earth Filter Media* is the filter media used to filter seawater or other authorized completion fluids and subsequently washed from the filter.

21. *Diesel Oil* is the distillate fuel oil, as specified in the American Society for Testing and Materials (ASTM) Specification D975-81, that is typically used as the continuous phase in conventional oil-based drilling fluids, which contains a number of toxic pollutants. For the purpose of any particular operation under this permit, diesel oil shall refer to the fuel oil present on the facility.

22. *Domestic Waste* is the discharge from galleys, sinks, showers, safety showers, eye wash stations, hand

washing stations, fish cleaning stations, and laundries.

23. *Drill Cuttings* are particles generated by drilling into the subsurface geological formations including cured cement carried to the surface with the drilling fluid.

24. *Drilling Fluids* are any fluids sent down the hole used in rotary drilling of wells to clean and condition the hole and counterbalance formation pressure, from the time a well is begun until final cessation of drilling in that hole and includes the four classes of drilling fluids: water-based, oil-based, enhanced mineral oil, and synthetic-based. (1) A water-based drilling fluid has water as the continuous phase and the suspending medium for solids, whether or not oil is present. (2) An oil-based drilling fluid has diesel oil, mineral oil, or some other oil, but neither a synthetic material nor enhanced material oil, as its continuous phase with water as the dispersed phase. (3) An enhanced mineral oil-based drilling has an enhanced mineral oil as its continuous phase with water as the dispersed phase. (4) A synthetic-based drilling fluid has a synthetic material as its continuous phase with water as the dispersed phase.

25. *End of well Sample* means the sample taken after the final log run is completed and prior to bulk discharge.

26. *Excess Cement Slurry* means the excess mixed cement, including additives and wastes from equipment washdown after a cementing operation.

27. *Existing Sources* are facilities conducting exploration activities and those that have commenced development or production activities that were permitted as of the effective date of the Offshore Guidelines (March 4, 1993).

28. *Free Oil* is oil that causes a sheen, streak, or slick on the surface of the test container or receiving water; which methodology for compliance is determined in the permit.

29. *Garbage* "means all kinds of food waste, wastes generated in living areas on the facility, and operational waste, excluding fresh fish and parts thereof, generated during the normal operation of the facility and liable to be disposed of continuously or periodically, except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78."

30. *Grab Sample* means an individual sample collected in less than 15 minutes.

31. *Graywater* is drainage from dishwater, shower, laundry, bath, and washbasin drains and does not include drainage from toilets, urinals, hospitals,

and drainage from cargo areas (see MARPOL 73/78 regulations).

32. *Inverse Emulsion Drilling Fluids* are oil-based drilling fluids which also contain large amounts of water.

33. *Live Bottom Areas* are those areas that contain biological assemblages consisting of such sessile invertebrates as sea fans, sea whips, hydroids, anemones, ascidians sponges, bryozoans, seagrasses, or corals living upon and attached to naturally occurring hard or rocky formations with fishes and other fauna.

34. *Maximum Hourly Rate* is the greatest number of barrels of drilling fluids discharged within one hour, expressed as barrels per hour.

35. *Muds, Cuttings, and Cement at the Seafloor* means discharges that occur at the seafloor prior to installation of the marine riser and during marine riser disconnect, well abandonment, and plugging operations.

36. *National Pollutant Discharge Elimination System (NPDES)* means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements under sections 307, 318, 402, 403, and 405 of the Act.

37. *New Source* means any facility or activity of this subcategory that meets the definition of "new source" under 40 CFR 122.2 and meets the criteria for determination of new sources under 40 CFR 122.29(b) applied consistently with all of the following definitions: (i) The term water area as used in the term "site" in 40 CFR 122.29 and 122.2 shall mean the water area and ocean floor beneath any exploratory, development, or production facility where such facility is conducting its exploratory, development or production activities, (ii) the term significant site preparation work as used in 40 CFR 122.29 shall mean the process of surveying, clearing, or preparing an area of the ocean floor for the purpose of constructing or placing a development or production facility on or over the site.

38. *No Activity Zones* include those areas identified by MMS where no structures, drilling rigs, or pipelines will be allowed. These zones are identified as lease stipulations in U.S. Department of the Interior, MMS, August 1990, Environmental Impact Statement for Sales 131, 135, and 137 Western, Central, and Eastern Gulf of Mexico. Additional no activity zones may be identified by MMS during the life of this permit, and by the States of Alabama, Mississippi and Florida within their territorial waters (up to 3 miles offshore) where no structures, drilling rigs, or pipelines will be allowed.

39. *No Discharge Areas* are areas specified by EPA where discharge of pollutants may not occur.

40. *Non-Operational Leases* are those leases on which no discharge has taken place within 2 years prior to the effective date of the new general permits.

41. *Operating Facilities* are leases on which a discharge has taken place within 2 years of the effective date of the new general permits.

42. *Packer Fluids* are low solids fluids between the packer, production string, and well casing. They are considered to be workover fluids.

43. *Priority Pollutants* are the 126 chemicals or elements identified by EPA, pursuant to section 307 of the Clean Water Act and 40 CFR 401.15.

44. *Produced Sand* is slurrified particles used in hydraulic fracturing, the accumulated sands and scales particles generated during production. Produced sand also includes desander discharge from produced water waste stream and blowdown of water phase from produced water treating systems.

45. *Produced Water* is water and particulate matter associated with oil and gas producing formations. Produced water includes small volumes of treating chemicals that return to the surface with the produced fluids and pass through the produced water treating system.

46. *Sanitary Waste* means human body waste discharged from toilets and urinals.

47. *Severe Property Damage* means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

48. *Sheen* means a silvery or metallic sheen, gloss, or increased reflectivity; visual color; iridescence; or oil slick on the water surface.

49. *Source Water and Sand* are the water and entrained solids brought to the surface from non-hydrocarbon bearing formations for the purpose of pressure maintenance or secondary recovery.

50. *Spotting* means the process of adding a lubricant (spot) downhole to free stuck pipe.

51. *Territorial Seas* means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

52. *Trace Amounts* means that if materials added downhole as well treatment, completion, or workover fluids do not contain priority pollutants then the discharge is assumed not to contain priority pollutants except possibly in trace amounts.

53. *Uncontaminated Ballast/Bilge water* means seawater added or removed to maintain proper draft.

54. *Uncontaminated Seawater* means seawater that is returned to the sea without the addition of chemicals. Included are (1) discharges of excess seawater that permit the continuous operation of fire control and utility lift pumps, (2) excess seawater from pressure maintenance and secondary recovery projects, (3) water released during the training and testing of personnel in fire protection, (4) seawater used to pressure test piping, and (5) once through non-contact cooling water.

55. *Uncontaminated Freshwater* "freshwater which is discharged without the addition of chemicals; examples include: (1) discharges of excess freshwater that permit the

continuous operation of fire control and utility lift pumps, (2) excess freshwater from pressure maintenance and secondary recovery projects, (3) water released during fire protection tests and training, and (4) water used to pressure test piping."

55. *Upset* means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate maintenance, or careless or improper operation.

56. *Well treatment fluids* are any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled. These fluids move into the formation and return to the surface as a slug with the produced water.

Stimulation fluids include substances such as acids, solvents, and propping agents.

57. *Workover fluids* are salt solutions, weighted brines, polymers, and other specialty additives used in a producing well to allow safe repair and maintenance or abandonment procedures. High solids drilling fluids used during workover operations are not considered workover fluids by definition and therefore must meet drilling fluid effluent limitations before discharge may occur. Packer fluids, low solids fluids between the packer, production string, and well casing are considered to be workover fluids and must meet only the effluent requirements imposed on workover fluids.

58. The term MGD means million gallons per day.

59. The term mg/l means milligrams per liter or parts per million (ppm).

60. The term ug/l shall mean micrograms per liter or part per billion (ppb).

Existing Sources

TABLE 2.—EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Drilling Fluids	Oil-based Drilling Fluids.	No discharge.			
	Oil-contaminated Drilling Fluids.	No discharge.			
	Drilling Fluids to Which Diesel Oil has been Added.	No discharge.			
	Mercury and Cadmium in Barite.	No discharge of drilling fluids if added barite contains Hg in excess of 1.0 mg/kg or Cd in excess of 3.0 mg/kg (dry wt).	Once per new source of barite used.	Flame and flameless AAS.	mg Hg and mg Cd/kg in stock barite.
	Toxicity ^a	30,000 ppm daily minimum 30,000 ppm monthly average minimum.	Once/month Once/end of well ^b . Once/month	Grab/96-hr LC50 using <i>Mysidopsis bahia</i> ; Method at 58 FR 12507.	Minimum LC50 of tests performed and monthly average LC50.
	Free Oil	No free oil	Once/day prior to discharge.	Static sheen; Method at 58 FR 12506.	Number of days sheen observed.
	Maximum Discharge Rate.	1,000 barrels/hr	Once/hour	Estimate	Max. hourly rate in bbl/hr
	Mineral Oil	Mineral oil may be used only as a carrier fluid, lubricity additive, or pill.			
Drilling Fluids Inventory.	Record	Once/well	Inventory	Chemical constituents.	
Volume	Report	Once/month	Estimate	Monthly total in bbl/month.	

TABLE 2.—EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT—Continued

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Drill Cuttings	Within 1000 Meters of an Areas of Biological Concern (ABC). NOTE: Drill cuttings are subject to the same limitations/prohibitions as drilling fluids except <i>Maximum Discharge Rate</i> .	No discharge.			
Produced Water	Free Oil	No free oil	Once/day prior to discharge.	Static sheen; Method at 58 FR 12506.	Number of days sheen observed
	Volume	Report	Once/month	Estimate	Monthly total in bbl/month
	Oil and Grease	42 mg/l daily maximum and 29 mg/l monthly average.	Once/month ^c	Grab/Gravimetric.	Daily max. and monthly avg.
	Toxicity	Acute toxicity (LC50); critical dilution as specified by the requirements at Part I.B.3(b) and Appendix A of this permit.	Once/2 months	Grab/96-hour LC50 using <i>Mysidopsis bahia</i> and inland silverside minnow (Method in EPA/600/4-90/027F).	Minimum LC50 for both species and full laboratory report
	Flow (bbl/month). Within 1000 meters of an Area of Biological Concern (ABC).	No discharge.	Once/month	Estimate	Monthly rate
Deck Drainage	Free Oil	No free oil	Once/day when discharging ^d .	Visual sheen	Number of days sheen observed
	Volume (bbl/month). No Discharge.		Once/month	Estimate	Monthly total
Produced Sand	Free Oil	No free oil	Once/day when discharging.	Static sheen	Number of days sheen observed
Well Treatment, Completion, and Workover Fluids (includes packer fluids) ^e .	Oil and Grease	42 mg/l daily maximum and 29 mg/l monthly average.	Once/month	Grab/Gravimetric.	Daily max. and monthly avg.
	Priority Pollutants.	No priority pollutants		Monitor added materials.	
	Volume (bbl/month).		Once/month	Estimate	Monthly total
Sanitary Waste (Continuously manned by 10 or more persons) ^f .	Solids	No floating solids	Once/day, in daylight.	Observation	Number of days solids observed
	Residual Chlorine.	At least (but as close to) 1 mg/l	Once/month	Grab/Hach CN-66-DPD.	Concentration
	Flow (MGD)		Once/month	Estimate.	
Sanitary Waste (Continuously manned by 9 or fewer persons or intermittently by any) ^f .	Solids	No floating solids	Once/day, in daylight.	Observation	Number of days solids observed
Domestic Waste	Solids	No floating solids; no food waste within 12 miles of land; comminuted food waste smaller than 25-mm beyond 12 miles.	Once/day following morning or midday meal at time of maximum expected discharge.	Observation	Number of days solids observed

TABLE 2.—EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT—Continued

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Miscellaneous Discharges—Desalination Unit; Blowout Preventer Fluid; Uncontaminated Ballast/Bilge Water, Mud, Cuttings, and Cement at the Seafloor; Uncontaminated Seawater; Boiler Blowdown; Source Water and Sand; Uncontaminated Fresh Water; Excess Cement Slurry; Diatomaceous Earth Filter Media.	Free Oil	No free oil	Once/day when discharging.	Visual sheen	Number of days sheen observed

^aToxicity test to be conducted using suspended particulate phase (SPP) of a 9:1 seawater:mud dilution. The sample shall be taken beneath the shale shaker, or if there are no returns across the shaker, the sample must be taken from a location that is characteristic of the overall mud system to be discharged.

^bSample shall be taken after the final log run is completed and prior to bulk discharge.

^cThe daily maximum concentration may be based on the average of up to four grab sample results in the 24 hour period.

^dWhen discharging and facility is manned. Monitoring shall be accomplished during times when observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge.

^eNo discharge of priority pollutants except in trace amounts. Information on the specific chemical composition shall be recorded but not reported unless requested by EPA.

^fAny facility that properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under Section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation and test results maintained at the facility.

New Sources

TABLE 3.—EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Drilling Fluids	Oil-based Drilling Fluids.	No discharge.			
	Oil-contaminated Drilling Fluids.	No discharge.			
	Drilling Fluids to Which Diesel Oil has been Added.	No discharge.			
	Mercury and Cadmium in Barite.	No discharge of drilling fluids if added barite contains Hg in excess of 1.0 mg/kg or Cd in excess of 3.0 mg/kg (dry wt).	Once per new source of barite used.	Flame and flameless AAS.	mg Hg and mg Cd/kg in stock barite.
	Toxicity ^a	30,000 ppm daily minimum 30,000 ppm monthly average minimum.	Once/month Once/end of well ^b . Once/month	Grab/96-hr LC50 using <i>Mysidopsis bahia</i> ; Method at 58 FR 12507.	Minimum LC50 of tests performed and monthly average LC50.
	Free Oil	No free oil	Once/day prior to discharge.	Static sheen; Method at 58 FR 12506.	Number of days sheen observed.
	Maximum Discharge Rate.	1,000 barrels/hr	Once/hour	Estimate	Max. hourly rate in bbl/hr.
	Mineral Oil	Mineral oil may be used only as a carrier fluid, lubricity additive, or pill.			
Drilling Fluids Inventory.	Record	Once/well	Inventory	Chemical constituents.	
Volume	Report	Once/month	Estimate	Monthly total in bbl/month.	

TABLE 3.— EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT—Continued

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Drill Cuttings	Within 1000 Meters of an Areas of Biological Concern (ABC).	No discharge.			
	NOTE: Drill cuttings are subject to the same limitations/prohibitions as drilling fluids except Maximum Discharge Rate.				
Produced Water	Free Oil	No free oil	Once/day prior to discharge.	Static sheen; Method at 58 FR 12506.	Number of days sheen observed
	Volume	Report	Once/month	Estimate	Monthly total in bbl/month
	Oil and Grease Toxicity	42 mg/l daily maximum and 29 mg/l monthly average. Acute toxicity (LC50); critical dilution as specified by the requirements at Part I.B.3(b) and Appendix A of this permit.	Once/month ^c ... Once/2 months	Grab/ Gravimetric. Grab/96-hour LC50 using <i>Mysidopsis bahia</i> and inland silverside minnow (Method in EPA/600/4-90/027F).	Daily max. and monthly avg. Minimum LC50 for both species and full laboratory report
Deck Drainage	Flow (bbl/month). Within 1000 meters of an Area of Biological Concern (ABC).	No discharge.	Once/month	Estimate	Monthly rate
	Free Oil	No free oil	Once/day when discharging ^d .	Visual sheen	Number of days sheen observed
Produced Sand	Volume (bbl/month).		Once/month	Estimate	Monthly total
	No Discharge.				
Well Treatment, Completion, and Workover Fluids (includes packer fluids) ^e .	Free Oil	No free oil	Once/day when discharging.	Static sheen	Number of days sheen observed.
	Oil and Grease	42 mg/l daily maximum and 29 mg/l monthly average.	Once/month	Grab/ Gravimetric.	Daily max. and monthly avg.
	Priority Pollutants. Volume (bbl/month).	No priority pollutants	Once/month	Monitor added materials. Estimate	Monthly total.
Sanitary Waste (Continuously manned by 10 or more persons) ^f .	Solids	No floating solids	Once/day, in daylight.	Observation	Number of days solids observed.
	Residual Chlorine At least (but as close to) 1 mg/l.	Once/month	Grab/Hach CN-66-DPD.	Concentration..	
Sanitary Waste (Continuously manned by 9 or fewer persons or intermittently by any) ^f .	Flow (MGD)		Once/month	Estimate.	
	Solids	No floating solids	Once/day, in daylight.	Observation	Number of days solids observed.
Domestic Waste	Solids	No floating solids; no food waste within 12 miles of land; comminuted food waste smaller than 25-mm beyond 12 miles.	Once/day following morning or midday meal at time of maximum expected discharge.	Observation	Number of days solids observed.

TABLE 3.— EFFLUENT LIMITATIONS, PROHIBITIONS, AND MONITORING REQUIREMENTS FOR THE EASTERN GULF OF MEXICO NPDES GENERAL PERMIT—Continued

Discharge	Regulated & monitored discharge parameter	Discharge limitation/prohibition	Monitoring requirement		
			Measurement frequency	Sample type/method	Recorded/reported value
Miscellaneous Discharges Desalination Unit; Blowout Preventer Fluid; Uncontaminated Ballast/Bilge Water, Mud, Cuttings, and Cement at the Seafloor; Uncontaminated Seawater; Boiler Blowdown; Source Water and Sand; Uncontaminated Freshwater, Excess Cement Slurry, Diatomaceous Earth Filter Media.	Free Oil	No free oil	Once/day when discharging.	Visual sheen	Number of days sheen observed.

^aToxicity test to be conducted using suspended particulate phase (SPP) of a 9:1 seawater:mud dilution. The sample shall be taken beneath the shale shaker, or if there are no returns across the shaker, the sample must be taken from a location that is characteristic of the overall mud system to be discharged.

^bSample shall be taken after the final log run is completed and prior to bulk discharge.

^cThe daily maximum concentration may be based on the average of up to four grab sample results in the 24 hour period.

^dWhen discharging and facility is manned. Monitoring shall be accomplished during times when observation of a visual sheen on the surface of the receiving water is possible in the vicinity of the discharge.

^eNo discharge of priority pollutants except in trace amounts. Information on the specific chemical composition shall be recorded but not reported unless requested by EPA.

^fAny facility that properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under Section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation and test results maintained at the facility.

Appendix A

Effluent concentrations at the edge of a 100-m mixing zone will be modeled by EPA for each produced water outfall listed in an operator's notice of commencement of production operations. This projected effluent concentration will be used to calculate the permit limitation for produced water toxicity (0.01 x projected effluent concentration). The discharge will be modeled using each facility's measured water column conditions and discharge configurations as input for the CORMIX expert system for hydrodynamic mixing zone analysis.

The notice of commencement of production operations will be accompanied by a completed CORMIX input parameter table presented as Table A-1. The input parameters required are the following.

Anticipated average discharge rate (bbl/day)

Water depth (meters)

Discharge pipe location in the water column (meters from surface or bottom)

Discharge pipe orientation with respect to the prevailing current (degrees; 0° is coflowing)

Discharge pipe opening diameter (meters)

Discharge horizontal angle between port direction in the horizontal plane and the direction of ambient flow: (sigma)

These parameters are site-specific parameters that the operator must determine through monitoring or measurement and certify as true to the best of their knowledge. All other input parameters for the CORMIX model are established as the following.

Discharge density: 1070.2 kg/m³
 Discharge concentration: 100%
 Legal mixing zone: 100 meters
 Darcy-Wiesbach constant: 0.2
 Current speed: 5 cm/sec
 Discharge pipe orientation: Coflowing with current
 Linear water column density profile:
 Surface density: 1,023.0 kg/m³
 Density gradient: 0.163 kg/m³/m

The Region will conduct the model using the operator's input parameters and report the toxicity limitation to the operator. If the parameters supplied by the operator change during the life of the permit (e.g., average discharge rate increases or decreases, a change in discharge pipe orientation, etc.), the operator should submit the new input parameters to the Region so that a new toxicity limitation can be calculated.

Compliance with the toxicity limitation will be demonstrated by conducting 96-hour toxicity tests using mysids (*Mysidopsis bahia*) and the Inland silverside minnow (*Menidia beryllina*) once every two months. The LC50 for each species will be reported on the DMR and a copy of the complete laboratory report shall be submitted.

Facilities that pass six consecutive produced water toxicity tests for six will be allowed to change to a frequency of once/ every six months; otherwise bimonthly testing shall continue.

Table A-1. CORMIX (Version 3.2) Input Parameters for Toxicity Limitation Calculation

Permit number: _____

GMG28 _____

Company: _____

Contact name/Phone number: _____

Lease block/number: _____

Facility name: _____

Parameter

Discharge Rate

Water depth

Units

____ Average bbl/day

____ meters

Discharge pipe location in the water column

meters from _____

water surface, or _____

seafloor _____

Discharge pipe orientation (vertical angle)

with respect to the seafloor: Theta

degrees

(90° is directed toward the surface)

(-90° is directed toward the seafloor)

Discharge pipe opening diameter:

meters

Discharge horizontal angle between port

direction in the horizontal plane and the

direction of ambient flow: (sigma)

degrees

(0° is coflowing with ambient current)

(90° is perpendicular to ambient flow)

Appendix B

