

Final NPDES General Permit for Discharges from New and Existing Sources in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category for the Western Portion of the Outer Continental Shelf of the Gulf of Mexico (GMG290000)

Agency: United States Environmental Protection Agency

Action: Final permit decision and response to comments received on the draft reissued NPDES permit publicly noticed in the Federal Register on March 7, 2012.

Date: September 28, 2012

SUBSTANTIAL CHANGES FROM PROPOSED PERMIT:

All changes are discussed in the “Responses to Comments” section below and only substantial changes are listed here.

1. Change the deadline to file eNOIs for continuous coverage from 90 days from the effective date of the permit to January 31, 2013;
2. Permit coverage and compliance start when an eNOI is filed;
3. Add characterization study for water-based drilling mud;
4. Allow discharges of hydrate control fluids without toxicity testing requirements for discharges containing methanol up to 20 bbl/event and ethylene glycol up to 200 bbl/event;
5. Change the toxicity re-testing criteria to include increase of critical dilution;
6. Add chlorine and bromine to the exclusion list of toxicity tests for chemically treated miscellaneous discharges;
7. Delete the provision of “alternative to visual or remote inspection” but allow “other monitoring device” to be used for visual or remote inspection;
8. Exclude routine biocide treatment of cooling water intake structure velocity monitoring system from conditions established for chemically treated seawater;
9. Change the entrainment monitoring frequency from monthly to quarterly after the 24-month study period;
10. Change the first NetDMR reporting period end date from October 31, 2013 to December 31, 2013, and change the annual reporting period from October through September to January through December.
11. Allow paper DMRs to be submitted within 60 days after the reporting period, if paper DMRs are required;
12. Allow electronic records to be used for inspection purposes; and
13. Allow biocides to be added to sump/drain systems.

REGULATORY REQUIREMENTS:

State Water Quality Standards and State Certification. The permit does not authorize discharges to State waters; therefore, the state water quality certification provisions of the Clean Water Act (CWA or 'the Act') Section 401 do not apply to this proposed action.

Coastal Zone Management Act. The Environmental Protection Agency (EPA) determined that activities authorized by this reissued permit are consistent with the local and state Coastal Zone Management Plans. Both the Louisiana Department of Natural Resources and the Railroad Commission of Texas concurred with EPA's consistency determination.

Oil Spill Requirements. CWA Section 311 prohibits the discharge of oil and hazardous materials in harmful quantities. Discharges authorized by NPDES permits are excluded from the provisions of Section 311. However, the permit does 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 which are covered by Section 311 of the Act.

Ocean Discharge Criteria Evaluation. For discharges into waters of the territorial sea, contiguous zone, or oceans, CWA Section 403(c) requires EPA to consider guidelines for determining potential degradation of the marine environment when issuing NPDES permits. These Ocean Discharge Criteria (40 CFR 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). EPA Region 6 determined that discharges in compliance with the Outer Continental Shelf (OCS) general permit would not cause unreasonable degradation of the marine environment.

Marine Protection, Research, and Sanctuaries Act. The Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 regulates the transportation for dumping of materials into ocean waters and establishes permit programs for ocean dumping. This reissued permit does not authorize dumping under MPRSA.

In addition, the MPRSA establishes the Marine Sanctuaries Program, implemented by the National Oceanographic and Atmospheric Administration (NOAA). The program requires NOAA to designate certain ocean waters as marine sanctuaries for the purpose of preserving or restoring their conservation, recreational, ecological or aesthetic values. Pursuant to the MPRSA, NOAA has designated the Flower Garden Banks, an area within the coverage of the OCS general permit, a marine sanctuary. The OCS general permit prohibits discharges in areas of biological concern, including marine sanctuaries. The permit authorizes discharges incidental to oil and gas production from a facility which predates designation of the Flower Garden Banks as a National Marine Sanctuary. EPA has previously worked extensively with NOAA to ensure that authorized discharges are consistent with regulations governing the Flower Garden Banks.

National Environmental Policy Act. In connection with its oil and gas leasing programs under the Outer Continental Shelf Lands Act, the Bureau of Ocean Energy Management (BOEM) of the Department of Interior has prepared and published a final programmatic environmental impact statement (PEIS) on potential impacts of oil and gas operations in the Central and

Western Gulf of Mexico for 2012 - 2017. The final PEIS is available at <http://boem.gov/5-Year/2012-2017/PEIS.aspx>. EPA is a cooperating agency on BOEM's PEIS and intends to use that PEIS to fulfill the National Environmental Policy Act obligations for this permit issuance.

Magnuson-Stevens Fisheries Conservation and Management Act. The Magnuson-Stevens Fisheries Conservation and Management Act requires that federal agencies proposing to authorize actions that may adversely affect essential fish habitat (EFH) consult with the National Marine Fisheries Service (NMFS). The entire Gulf of Mexico has been designated as EFH. EPA intends to adopt the EFH analysis BOEM prepared in the above mentioned PEIS for lease sales in the Western and Central Planning Areas (WPA and CPA). BOEM concludes in the PEIS that "impacts of routine dredging and discharges are localized in time and space and are regulated by Federal and State agencies through permitting processes; therefore, there would be minimal impact to fish resources and essential fish habitat from these routine activities associated with a WPA or CPA proposed action." BOEM also concludes that "if there is an effect of an oil spill on fish resources in the Gulf of Mexico, it is expected to cause a minimal decrease in standing stocks of any population. This is because most spill events would be localized, therefore affecting a small portion of fish populations." This permit contains limitations conforming to EPA's Oil and Gas extraction, Offshore Subcategory Effluent Limitations Guidelines at 40 CFR Part 435 and additional requirements assuring that regulated discharges will cause no unreasonable degradation of the marine environment, as required by CWA Section 403(c). This permit also does not authorize spills or any uncontrolled discharges.

Endangered Species Act (ESA). Section 7 of the Endangered Species Act (16 U.S.C. 1531 *et seq.*; ESA §7) requires Federal agencies to insure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat. In assessing the effects of reissuance of this permit, EPA considered the effects of activities being authorized by the permit. Unauthorized activities, such as discharges related to spills, are not within the scope of the permitting action and therefore are not an "action authorized, funded, or carried out" by EPA.

The effects of EPA's permitting action are considered in the context of the environmental baseline. The environmental baseline is established by the past and present impacts of all Federal, State, or private actions and other human activities in an action area; the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early ESA §7 consultation; and the impact of State or private actions that are contemporaneous with the consultation in process (50 CFR §402.02). While EPA's ESA consultations on previous permits are also part of the environmental baseline, it is the actions and ESA consultations of the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) (and their predecessor agencies) that form the primary basis for the environmental baseline that exists at the time any discharge would be authorized by the permit.

Discharges that would be authorized under the OCS permit would not occur without prior federal actions by BOEM and BSEE to authorize oil and gas exploration, production, and development in the Gulf of Mexico (e.g., lease sales, approval of drilling plans, etc.). These federal actions by BOEM and BSEE must undergo ESA §7 consultations, resulting in biological opinions or concurrences by the National Marine Fisheries Service (NMFS) that establish an environmental

baseline. Reissuance of the OCS permit is an interrelated action that depends on the actions of BOEM and BSEE for its justification. In accordance with 50 CFR §402.02, the effects of reissuance of the OCS permit are defined as "...the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline." BOEM and BSEE actions and ESA §7 consultations, which discuss the interrelated discharges authorized by NPDES permits, establish an environmental baseline against which to measure the effects of EPA's authorization of discharges.

When EPA Region 6 initiated ESA §7 consultations with the FWS and NMFS in 2004, EPA determined that discharges to be authorized by the reissued permit may affect but are unlikely to adversely affect the sperm whale (*Physeter macrocephalus*), Kemp's ridley turtle (*Lepidochelys kempii*), loggerhead turtle (*Caretta caretta*), leatherback turtle (*Dermochelys coriacea*), hawksbill turtle (*Eretmochelys imbricata*), and the green turtle (*Chelonia mydas*). Previous EPA consultations also document a "no effect" determination for the northern right whale (*Eubalaena glacialis*), the blue whale (*Balaenoptera musculus*), the finback whale (*Balaenoptera physalus*), the sei whale (*Balaenoptera borealis*), the humpback whale (*Megaptera novaeangliae*), and the Gulf Sturgeon (*Acipenser oxyrinchus desotoi*). NOAA concurred with EPA's determination in a letter dated July 12, 2004.

There are four waste streams which may affect, but are unlikely to adversely affect sperm whale and several listed sea turtles: produced water, drilling fluids, drill cuttings, and chemically treated miscellaneous discharges. There have been no changes of limitations for these four types of discharges since the 2004 permit, except for requirements of characterization studies to collect site-specific data for future water quality impact evaluations. Other discharges which have been authorized prior to the 2004 issued permit or added after the 2004 issued permit, have been determined by EPA to have "no effect" on the listed species. Also, those discharges will not adversely modify critical habitat due to their nature and/or quantity. Because there have been no changes of permit conditions since the 2004 permit for the four waste streams which may affect the listed species, EPA has determined that the reissuance of this permit has no effect beyond the environmental baseline established during the 2004 ESA consultation.

In conclusion, EPA has determined that, measured against the environmental baseline set by consultations on the larger federal actions of authorizing oil and gas exploration, production, and development in the Gulf of Mexico that will have occurred prior to authorization of discharges under the permit and EPA's previous consultations, reissuance of NPDES Permit No. GMG290000 will have no effect on listed endangered species nor adversely modify critical habitat.

Paperwork Reduction Act. The information collection required by this permit will reduce paperwork significantly through implementation of electronic reporting requirements. EPA is working on an electronic notice of intent (eNOI) system which will allow applicants to file their NOIs online. EPA estimates that it takes 10 to 15 minutes to fill in all information required by the eNOI for each lease block. It also takes much less time to add, delete, or modify eNOIs. In addition to the eNOI system, EPA will incorporate an electronic discharge monitoring report (NetDMR) requirement into the permit. The time necessary for NetDMR preparation will be

much less than that for paper DMR preparation. Both electronic filing systems will significantly reduce the mailing costs.

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 below, the permit reissuance proposed 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’s effluent limitations are based. The analysis shows that reissuance of this permit will not have a significant impact on a substantial number of small entities.

RESPONSES TO COMMENTS:

Nine (9) entities submitted comments: Anadarko Petroleum Corporation, API, Bureau of Ocean Energy Management, Castrol Offshore, International Association of Drilling Contractors, Louisiana Mid-Continent Oil & Gas Association, Liskow & Lewis, Offshore Operators Committee, and Shell Exploration and Production Company.

Anadarko Petroleum Corporation (Anadarko)

Comment: Anadarko stated that it fully supports the Offshore Operators Committee's (OOC) comments to the draft NPDES General Permit GMG290000, dated March 7, 2012, and all attachments submitted to EPA. Anadarko also mentioned several issues, such as eNOI, NetDMR, and some effluent limitations and prohibitions, which are included in OOC’s comments.

Response: Comments are noted. Anadarko’s concerns are addressed in the responses to OOC’s comments.

API

Comment: API stated that it fully supports and endorses the comments on the proposed permit submitted by OOC. API referred EPA to these comments, and urges EPA to respond to OOC's recommendations provided there.

Response: Comments are noted. See EPA’s responses to OOC’s comments.

Shell Exploration and Production Company (Shell)

Comment: Shell stated that it fully supports and endorses the comments submitted by OOC.

Response: Comments are noted. See EPA’s responses to OOC’s comments.

International Association of Drilling Contractors (IADC)

Comment 1 (Definition of Operator): IADC commented that the EPA has defined the term “operator” in so many ways that it seemingly appears that they are trying to include any and all

parties that are currently associated with oil and gas exploration, development and production activities under a single term. IADC also viewed the party which has “operational control” to be the well-site supervisor, which is the site representative of the lessee or operator designated in accordance with the BOEM regulations. Thus, this party is normally the on-site representative that provides guidance and direction to the person-in-charge (Master/OIM) of the mobile offshore drilling unit (MODU) with respect to the overall direction that the well operations are to take.

Response: The definition of operator is an attempt to specify who would be considered an “operator” of discharges regulated by the NPDES permit. Under 40 CFR §122.21(b), when a facility is owned by one party, but operated by another, it is the operator’s duty to apply for a permit. IADC also provided examples of scenarios in which a third party operated some discharges from a platform or MODU, but the primary facility operator effectively had little or no control over those activities. Where one party does not have complete operational control (e.g, owner retains control over some operational decisions, funding, etc.), more than one party may need permit authorization. Comments received by EPA indicate that the lease holder or the designated operator wants contractors to bear the responsibility of complying with the permit while the day-to-day operator or contractor wants owners or their representatives to bear the responsibility. In order to ensure every authorized discharge is covered by an NOI and that no duplicate NOIs are filed for the same discharge, the final permit is revised to require the lease holder or the designated operator registered with the BOEM to be the primary operator to file an NOI for all discharges. Other operators or vessel operators are required to file an NOI for discharges beyond the control of the primary operator. It is EPA’s expectation that in most cases, necessary delineations of operational control and responsibilities will be spelled out in contractual agreements between the parties.

Comment 2 (Filing of eNOI): IADC commented that: (a) The reason that the MODU itself was included in the General Permit was due to the fact that the design and certain operational characteristics of its Cooling Water Intake Structure (CWIS) needed to be made available for review and acceptance by EPA. The action of getting CWIS acceptance, as stated in the permit, should be a one-time only requirement rather than a repetitive submission of the same information for every well location that the rig is contracted to drill; (b) As stated in Section 12(a) (Application Information) of the proposed permit reissuance, the operator of the oil and gas extraction facility must provide the CWIS data “...with the NOI.” This implies that the CWIS data is a supplemental part, and not a request for permit coverage, in an NOI submission; and (c) Submission of a separate eNOI would require obtaining and providing all the site-specific, lease-based distinct information. This method does not support the fact that the MODU merely needs to have its CWIS accepted, and it may be problematic for some MODUs.

Response: EPA does not agree with IADC’s assertions stated above. When a MODU is stationed to engage in any oil or gas exploration, development, or production operation, all of its discharges are subject to the CWA and require coverage under NPDES permits. Therefore, MODUs may obtain coverage under this general permit or request authorization to discharge under an individual permit. Federal Register (Vol. 71, No. 116, February 16, 2006) states that “requirements for complying with section 316(b) will continue to be applied through NPDES permits.” The operation of a CWIS and authorized discharges (e.g., deck drainage, domestic or

sanitary wastes, etc) is regulated through the permit. The permit authorizes discharges tied to a “facility” at a particular location. In order to know where discharges are being authorized, location information is a necessary component of the NOI and thus a new NOI for new locations is required.

Liskow & Lewis (L&L) and Louisiana Mid-Continent Oil & Gas Association (LMOGA)

General Comment by L&L: On behalf of oil and gas clients that are actively involved in the Gulf of Mexico, Liskow & Lewis submits the following comments to the EPA.

General Comment by LMOGA: Several LMOGA members are also members of OOC. As such, LMOGA supports the comments being submitted by OOC. Should there be a material conflict between the LMOGA and OOC comments, the LMOGA comments should be disregarded.

Response: Both L&L and LMOGA (referred as L&LM below) submitted 18 comments, respectively. Because 17 of the comments submitted by L&L and LMOGA were identical, EPA combines their comments together for response.

Comment 1 (Produced Sand in Part I.B.5 [Part I, section B.10]): L&LM questioned whether EPA intends to prohibit the discharge of proppants from the drill string when reversing out after fracturing activities. L&L stated that installation of additional solids removal equipment is required to separate a relatively small amount of solid proppants from the well treatment fluids. Weight considerations would greatly restrict the operator's ability to add solids removal equipment.

Response: The definition of produced sands includes “slurried particles used in hydraulic fracturing (proppants).” Therefore, proppants should be handled by operators as produced sands with the current technology available at the facility. Sands and proppants that drop out of the well fluid stream in the separation process shall not be discharged.

Comment 2 (Hydrate Control Fluids and Other Miscellaneous Discharges in Part I.B.10): L&LM commented that hydrate control fluids are not typically discharged with other “miscellaneous discharges.” So, it is unclear what the following sentence is referring to: “If a small amount of hydrate control fluids is discharged with other miscellaneous discharges, a representative sample shall be used for the toxicity test for the miscellaneous discharge.” L&LM also requested EPA provide clarification on what quantity EPA considers to be a “small amount.”

Response: Hydrate control fluids are defined as a miscellaneous discharge in the currently expiring permit. The particular sentence referenced above only applies if used hydrate control fluids are pumped back to a platform or a MODU and mixed with other miscellaneous wastes for discharges. See the Response to OOC’s Comment 11 for more detail about changes in discharge quantity required for toxicity tests.

Comment 3 (Hydrate Control Fluid Toxicity in Part I.B.10): L&LM commented that most hydrate control fluid or (commonly called hydrate inhibitor, or “HI,” by industry) subsea discharges are due to connection/disconnection of subsea fluid transport systems (such as hot stabs, jumpers, flying leads, and umbilicals) or external hydrate removal with an ROV wand. These volumes are very small, usually less than 2 gallons. It appears to be overly burdensome for operators to run CORMIX modeling on every subsea connect/disconnect and ROV treatment since these discharges are relatively small in nature. L&LM suggests adding hydrate control fluid to the subsea fluids toxicity test requirement.

Response: OOC indicates in its comment 11 that the typical discharge volume range of HI is 6-200 bbl/day which is equivalent to 252-8,400 gallons per day. The quantity is much higher than 2 gallons. As discussed in the Response to OOC’s Comment 11, discharges of HI below certain volumes do not require toxicity tests. In case HI is discharged above the defined volume, a toxicity test could be conducted prior to the application of HI. The result would be good for one year and the permittee is required to demonstrate that the discharge volume does not exceed the NOEC correlated volume. For instance, if the NOEC correlated volume is 1,000 gallons, in order to comply with the toxicity limit, the operator shall control the discharge volume so that it is below 1,000 gallons per day.

Comment 4 (Cooling Water Intake Structures (CWIS) Monitoring Requirements in Part I.B.12): L&LM commented that it is always "unduly hazardous" to place human divers or ROVs in the water when thrusters are operational since the potential for the thruster to pull the diver/ROV into its structure is always present. L&LM suggested that the CWIS screen shall be visually inspected semiannually during times when either the system is blocked in for maintenance or turnaround activities, or the facility is not engaged in activities that require use of the thrusters. L&LM also questioned how the failure to visually or remotely monitor would be reported in the NetDMR.

Response: It is crucial that the CWIS be in operation when a visual or remote inspection is conducted to confirm that the required design and construction technologies are maintained and operated as designed. In the final version of this permit, EPA determined that a remote inspection could be conducted by a visual or non-visual device as long as the permittee could demonstrate the CWIS is operating as designed. The permittee may report the failure to conduct a visual or remote inspection with the quarterly report required in the Permit, Part I.B.12.d, and attach the quarterly report to the NetDMR until a separate NetDMR page is available for CWIS. The permittee may contact EPA Region 6 Enforcement staff for specific NetDMR questions.

Comment 5 (Proper Operation and Maintenance in Part II.B.6 [Part II, section B.6]): L&LM asked EPA to clarify permit condition established in Part II.B.6 regarding removed substances.

Response: The provision in Part II.B.6 restricts the disposal of any removed (or captured) solids into the waters of the U.S. Substances which are authorized for discharge by the permit, if there are any, shall comply with the permit conditions for discharges.

Comment 6 (Monitoring and Records in Part II.C.3): L&LM requested EPA to consider use of some electronic records for permit compliance purposes. For records that must be maintained in

paper form, L&L also requested that EPA recognizes that permittees are still in compliance with permit requirements during the time that paper records are being transported to shore for electronic scanning or long-term storage.

Response: Electronic records will be permitted for permit compliance purposes.

Comment 7 (Annual Monitoring Period in Part II.C.7): L&LM requested that EPA consider moving the Annual Monitoring Period from October 1 – September 30 to January 1 - December 31 for the new NetDMR submittals.

Response: To simplify the reporting period issue, EPA has changed the annual monitoring period to be from January 1 to December 31. The first annual monitoring period will cover the period from the effective date of the permit to December 31, 2013 (which could be more than 12 months).

Comment 8 (Reporting in Part II.D.4): L&L requested EPA provide guidance for monitoring reporting requirements for each “facility.”

Response: For DMR reporting purposes, a facility is the host facility, including all subsea infrastructure that is connected to the host. If a well is connected to a host facility, any discharge from that well shall be reported in the host facility’s DMRs.

Comment 9 (Definition of Well Treatment Fluid in Part II.G.88): L&LM requested to revise the definition of well treatment fluid to permit discrete discharges because well treatment fluid discharges have their own discharge limitations and could be discreet and not always part of produced water as the current definition states.

Response: The current definition includes the following sentence: “These fluids move into the formation and return to the surface as a slug with the produced water.” This sentence does not restrict discharges of well treatment fluids separately from produced water. However, discharges of excess fluids, excess mixed fluids, and fluids used for testing fluid handling equipment have never been authorized by the permit. A clarifying statement was added to the proposed permit and remains in the final permit.

Comment 10 (Definition of Fecal Coliform Bacteria Sample in Part II.G.38): L&LM suggested that EPA consider removing this definition since no reference is ever made to this term.

Response: The definition of fecal coliform bacteria sample has been deleted from the final permit.

Comment 11 (Definition of Production Facility): L&LM requested discharges from MODUs not actively drilling or performing activities related to oil and gas exploration and production be considered a vessel and subject only to MARPOL and US Coast Guard regulations.

Response: Under 40 CFR §122.3(a), only when a MODU is operating in the transportation mode (moving as a ship from one place to another) would discharges be exempt from NPDES

permits. No changes to the permit were made in response to this comment.

Comment 12 (Miscellaneous Discharges Treated by Hypochlorite or Chlorine in Part I.B.11): L&LM requested to exclude all discharges treated by hypochlorite or chlorine from the toxicity test.

Response: Exclusion of hypochlorite or chlorine treated miscellaneous discharges from toxicity testing was given in the 2007 issued permit. Chlorine has been added back to the exclusion in the final permit.

Comment 13 (Seawater Used as Piping or Equipment Preservation Fluids in Part I.B.11): L&LM requested that EPA add "seawater not being treated with chemicals used as piping or equipment preservation fluids" to the definition of "uncontaminated seawater."

Response: Information provided by OOC indicates that brines (not common seawater) would be used for piping or equipment preservation, and discharges of such brines would be subject to more stringent limitations as defined in Part I.B.10. Therefore, they are not considered "uncontaminated seawater."

Comment 14 (Facility Defined in Page 5 of the Fact Sheet): L&LM commented that it is not clear if EPA's intent is to cover subsea well heads, remotely operated vehicles (ROVs), and other sub-sea infrastructure as a facility.

Response: A facility means either an exploration facility, a development facility, or a production facility as defined in Part II.G of the permit. All well heads and infrastructure which have the potential to be a point of discharge and are connected to a facility shall be considered parts of the host facility. A clarifying statement has been added to the permit. Please note that the NPDES permit is a means of authorizing discharges of pollutants (except for CWIS under the CWA 316(b)) to waters of the U.S. So, if a facility or structure does not discharge pollutants to waters of the U.S., no NPDES permit coverage is required.

Comment 15 (Deck Drainage Defined in Page 7 of the Fact Sheet): L&LM requested EPA to include pollutants cited in the January 1993 Development Document for Effluent Limitation Guidelines and New Source Performance Standards for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category in the definition of deck drainage. Alternatively, L&LM requested that EPA consider allowing use of biocide in deck drainage systems if the permittee develops, implements, and maintains Best Management Practices (BMPs).

Response: See EPA's response to OOC's comment 43.

Comment 16 (Definition and Authorization of De Minimis Discharges): L&LM requested that EPA: (a) add authorization for de minimis discharges of subsea fluids under the Miscellaneous Discharge category in Part I.B.10; (b) include minor residual releases of drilling fluids from the annular space of a well following proper completion of the well in Part I.B.1(a); and (c) add a definition for de minimis discharge in Part II.G.

Response: (a) The de minimis discharges were designed to address significantly low volumes of discharges which were prohibited from discharging rather than those authorized for discharges. Also, if de minimis discharges are included in the miscellaneous discharges, de minimis discharges must comply with effluent limitations established for miscellaneous discharges. EPA has not changed the permit as requested by the commenter; (b) The commenter did not provide sufficient information for EPA to determine the need for such release of drilling fluids from the annulus. EPA has not changed the permit as requested by the commenter. Please note that this permit does not authorize continued de minimis discharges; and (c) EPA added a general definition for de minimis discharges in Part II.G., as requested.

Comment 17 (Annual Training): L&LM requested that EPA Region 6 hold an annual GMG290000 training session.

Response: EPA Region 6's Water Enforcement Branch has started providing eNOI workshops prior to the reissuance of the new permit and will continue to provide such training as needed. Specific decisions on future training will depend on available resources. For further eNOI and NetDMR training information or questions, please contact Ms. Helen Nguyen at 214-665-6458. Alternatively, the following website may be of use:

<http://www.epa.gov/earth1r6/6en/w/offshore/home.htm>.

Comment 18 (New Appendix Section): L&LM requested that EPA place all previous GMG290000 Permit Renewal and future Response to Public Comment in the Appendix Section of the GMG290000 Permit.

Response: Previous permits and response to comments are parts of administrative records, but not parts of the permit. However, EPA will make permits and response to comments issued after 2004 available on EPA Region 6's website.

Comment 19 (Discharge of Fluids Used for Equipment/System Tests in Part I.B.5): LMOGA requested EPA reconsider the new discharge prohibition of fluids (drilling muds, mixed well fluids, etc) that have been used for equipment/system tests.

Response: This prohibition provision is not a new permit condition, rather it clarifies one of the questions raised by industry during the preparation of the draft permit. The 2007 issued permit and previous permits did not authorize such discharges.

Castrol Offshore (Castrol)

Comment 1 (Miscellaneous Discharges in Part I.B.10): Castrol suggested that EPA add authorization of discharges of Castrol's products (i.e., hydraulic fluids, lubricants and greases) in the permit. Examples include products used in an open system like greases for jacking gears, and products used in a closed system like lubricants used in thrusters. Those products may have been regulated either by the U.S. Vessel General Permit or by the Norwegian Petroleum Activities Regulations.

Response: Please note that the Norwegian and U.S. laws are not necessarily consistent and the Norwegian laws don't apply in waters of the U.S. Please note that the permit does not include provision addressing specific brands or company products, but categories of discharges.

Comment 2 (Miscellaneous Discharge Toxicity Test in Part I.B.10): Castrol suggested that it would be more appropriate to measure toxicity, marine biodegradation, and bioaccumulation at the component level (each individual component in a formulation being tested). Castrol also suggested measuring toxicity at the product level to account for any synergistic effects in the formulation. If products that consist of a mixture of substances are only tested at the product level for toxicity, then chemicals with high toxicity, high bioaccumulation potential, and low biodegradation, but low concentration in the formulation can be discharged into the sea unregulated. Suggested test procedures and limits could be based around OSPAR criteria (criteria that the majority of the rest of the world use for assessing the discharge of chemicals offshore), based on OECD and ISO tests for biodegradability, toxicity, and bioaccumulation that are accepted internationally.

Response: Whole Effluent Toxicity (WET) refers to the aggregate toxic effect to aquatic organisms from all pollutants contained in a facility's wastewater (effluent). EPA has developed rules to implement WET tests which measure wastewater's effects on specific test organisms' ability to survive, grow, and reproduce. EPA appreciates the comment and may consider the information provided for future assessment purposes.

Comment 3 (Sheen Rule): Castrol suggested not applying a "no-sheen" rule to lubricants and hydraulic fluids.

Response: See EPA's response to Castrol's Comment 1. Comment is noted. While there is no specific authorization for discharge of lubricants and hydraulic fluids as separate wastestreams, some discharges authorized by this permit are subject to "no free oil" limitations monitored via a static sheen test. To the extent lubricants and hydraulic fluids are present in such discharges, the discharge would be indirectly subject to those limitations.

Bureau of Ocean Energy Management (BOEM)

Comment 1: BOEM requested that EPA have a contingency system in case of emergencies or failures of the eNOI system so that there is no delay in their agency's activities due to the lack of operators being able to meet the requirements of the Clean Water Act.

Response: EPA notes that the availability of the eNOI system should not affect either BOEM's or the Bureau of Safety and Environment Enforcement (BSEE)'s operations because operators can submit paper NOIs if an eNOI system is not available.

Comment 2: BOEM would like EPA to make a map publically available showing changes relative to BOEM/BSEE's lease blocks.

Response: Lease blocks covered by this general permit are all located within BOEM's Western and Central Planning Areas. A map which shows the jurisdictional boundary of EPA Region 6

and Region 4 oil and gas general permits is attached to the end of this response to comments.

Offshore Operators Committee (OOC)

Comment 1 (Operations Covered in Part I.A.1): OOC commented that it supports the ability to continue discharging produced water from wells located in Territorial Seas from facilities located in OCS waters which meet the requirements of GMG290000.

Response: Comment is noted.

Comment 2 (Notification Requirements in Part I.A.2): OOC included the following issues under this comment about notification requirements:

(a) OOC suggested using “permittee” consistently throughout the permit.

Response: “Permittee” is used in the permit to replace “operator” wherever appropriate.

(b) OOC suggested that permit coverage be effective at the time of submission of the NOI.

Response: Coverage is effective upon submission of eNOI. If a paper NOI is submitted prior to availability of eNOI, the postmark date will be evidence of delivery for coverage. However, EPA may deny coverage for specific operator(s) who file the NOI, if necessary (see EPA’s response to OOC’s Comment 2(c) below).

(c) OOC requested EPA to list the basis and/or criteria for denying coverage.

Response: Denial of permit coverage is expected to be rare and would be very case specific. 40 CFR §122.28(a)(4)(ii) allows EPA to exclude specified sources or areas from coverage. The basis for denial of coverage might include, but is not limited to: incomplete NOI submittal, failure to meet an eligibility condition, (e.g., location of discharge outside the permit area), individual permit required for continuous violators, court orders, and executive orders.

(d) OOC requested 120 days, instead of 90 days, to file eNOI for continuous coverage of current operations.

Response: The request is granted. The final permit allows operators who are covered under the expiring permit to file new eNOIs for continuous coverage by January 31, 2013 which is 4 months after the permit effective date.

(e) OOC expressed that they are willing to work with EPA on eNOI design and implementation.

Response: EPA appreciates OOC’s offer and has contacted industry representatives to test run the eNOI system from an end user’s standpoint.

(f) OOC requested that the eNOI not require lease owner/designated operator information.

Response: EPA considers it important to include both lease holder or designated operator and the day-to-day operator information in the system. Although the day-to-day operator is responsible for complying with all applicable permit requirements, the lease holder or designated operator who has the controlling power over the operator shall ensure the operator be in compliance with the permit. During the development of the draft permit, EPA considered requiring only either the lease holder or the designated operator file one NOI (as BOEM only

requires one entity for registration) for each lease block and list day-to-day operators under the same NOI. This would have made the lease holder/designated operator and day-to-day operator co-permittees covered by the permit. However, OOC opposed the co-permittee approach and expressed a preference for each operator to file its own NOI.

(g) OOC stated that variability in location for new facilities may occur.

Response: The permittee shall provide reasonably accurate information in the eNOI. If the actual facility location differs from the expected location, the permittee can update its eNOI information to reflect the final location. Application requirements for existing discharges and for new source/new discharges at 40 CFR §122.21(g)(1) and (k)(1) both require latitude and longitude of the discharge be identified to the nearest 15 seconds. A second of latitude is approximately 0.02 miles, or just over 100 feet, so location within 1500 feet (approximately 0.284 miles) would be considered reasonably accurate.

(h) OOC stated that a MODU may operate in various lease area/blocks through a DMR reporting period.

Response: The MODU operator shall submit a DMR for each lease block which covers the specific operating period in that particular lease block. The MODU operator may need to coordinate with the lease holder or designated operator to determine who is responsible for DMR reporting for specific type of discharges.

(i) OOC requested that “estimated volume” either be deleted or not be a compliance matter.

Response: Because “estimated volume” may change frequently, EPA concurs with this request and estimated volume is deleted from the eNOI requirements in the final permit.

(j) OOC requested that data requested in item (g) of the eNOI (expecting/actual drill/discharge commence date and well locations) either be deleted or not be used for enforcement actions.

Response: EPA will not use the information of “expecting...date” for enforcement purposes. An operator can update this information easily. The well location is required because it may be also a point of discharge. No changes to the permit have been made in response to this comment.

(k) OOC requested that data requested in item (h) of the eNOI (range of depth of water within the operation area) be deleted.

Response: This data will provide the estimated sea depth at a well. The permittee may provide the estimated sea depth instead.

(l) OOC requested clarification on whether information for new facilities is for identification purposes only.

Response: Identifying a facility as “new” is important for determining permit eligibility. If information collected in item (i) of the eNOI indicates that the new facility will not be able to comply with permit Part I.B.12.b (i.e., 0.5 ft/s of maximum through-screen design intake velocity), then that new facility may not be eligible for coverage. A new facility is required to be designed to comply with CWIS operation limitations and monitoring requirements.

(m) OOC: (i) requested not to require additional information for eNOI without public comment; (ii) requested that a transitional period be given for implementation of eNOI; (iii) objected to the

co-permittee requirement; and (iv) had a question regarding the delegation of eNOI signature.

Response: (i) Changes to the final permit may be based on comments received during the public comment period without opening a new comment period. The Response to Comments required by 40 CFR §124.17 must specify what, if any, conditions have been changed during the public comment period. To reopen a public comment period for additional eNOI information requirements would have delayed the reissuance of the final permit beyond the current permit expiration date of September 30, 2012. It is unlikely that EPA will require additional eNOI information during this new permit term, but any new requirements would require modification of the permit which would involve the opportunity for public comment on the proposed changes. (ii) EPA has already started providing eNOI training prior to the reissuance of this general permit. Specific decisions on future training will depend on available resources. (iii) The term “co-permittee” is not used in the final permit. (iv) An NOI takes the place of a permit application; signatories for an NOI must meet the requirements of 40 CFR §122.22(a) (e.g., president, vice-president, secretary, treasurer, manager of a facility (with restrictions), etc. for corporations) and may not be delegated under 40 CFR §122.9(b).

Comment 3 (Termination of Coverage in Part I.A.3): OOC stated that there are many possible reasons a permittee may be required to hold permit coverage after lease termination. OOC also requested that an electronic Notice of Termination (NOT) system be developed to communicate with the NetDMR system.

Response: If an operator needs to keep the permit coverage more than 60 days after lease termination, the operator shall contact EPA R6’s Water Enforcement Branch for extension of NOT filing. An electronic NOT system is being developed to communicate with the NetDMR system.

Comment 4 (Transfer in Part I.A.4):

(a) OOC requested to change the permit condition to allow the old permittee to file an NOT within 60 days of receiving confirmation that the new permittee has submitted the NOI.

Response: The final permit allows 60 days for the old permittee to terminate the coverage after the new permittee files an NOI for coverage, instead of 60 days after the termination of operations.

(b) OOC requested that the new permittee may file an NOI any time, not 30 days prior to taking the operational control.

Response: The 30 day restriction only applies to lease transfer during the “administratively continued” period. EPA needs additional time to manually activate the coverage for new operators after the permit expires because the eNOI system will automatically reject new coverage after the permit expiration date.

Comment 5 (Reporting Requirements in Part I.A.5):

(a) OOC requested clarification that eNOIs will be filed only when eNOI is available, and paper reports will be filed if reports are not filed electronically.

Response: Permit language has been revised for clarity. The ability to file a paper NOI has been included as a backup should the eNOI system not be available.

(b) OOC requested EPA to provide eNOI workshops in Houston and New Orleans.

Response: Request noted. EPA has already started providing eNOI training prior to the reissuance of this permit. Specific decisions on future training will depend on available resources.

(c) OOC inquired what information changes will trigger a re-submittal of eNOI.

Response: Whenever necessary, the responsible permittee can access its eNOI form for updating operator information, facility addition/removal, facility location changes, or change of discharges as described in the instructions.

Comment 6 (Effluent Limitations in Part I.B): OOC provided comments to EPA on the proposed method update rule, and requested that their comments be included as part of this administrative decision record.

Response: Request is noted. EPA is not incorporating comments as part of this administrative record because the method update rule making is not part of this permitting action. The final rule was published in the Federal Register, Vol. 77, No. 97 (May 18, 2012) and effective on June 18, 2012, and is independently applicable to NPDES permittees regardless of the permit they are authorized under.

Comment 7 (Drilling Fluids in Part I.B.1): OOC requested that the permit allow discharges of excess mixed water based mud.

Response: EPA has not changed the permit to incorporate this request. In the future, EPA may reconsider the request if OOC can provide more information on how such discharges may impact water quality, aquatic life, and endangered species. If OOC plans to conduct a study, EPA suggests that OOC also work with the National Marine Fisheries Service (NMFS) to ensure such additional discharges will have no adverse effect on endangered species and essential fish habitat.

Comment 8 (De Minimis Discharges in Part I.B.1.a): OOC supported the permit conditions set forth for de minimis discharges.

Response: Comment is noted.

Comment 9 (Characterization Study in Part I.B.1.c): OOC pointed out that a characterization study for drilling mud is required in the fact sheet but not in the permit.

Response: The permit language regarding the drilling mud study was omitted in error. It is included in the final permit.

Comment 10 (Produced Water in Part I.B.4): OOC supported regulation of salt slurry as produced water.

Response: Comment is noted.

Comment 11 (Toxicity Limitations in Part I.B.4.a):

(a) Commenter requested a one-year compliance schedule for discharges to comply with the more stringent critical dilutions (CD).

Response: The permit language was revised to allow the permittee one year to comply with the toxicity test requirement with new CDs. The CDs from the 2007 permit will be the interim limitations.

(b) Commenter requested that additional validations be provided for low discharge flow (0 – 500 bbl/d) because of the large percentage increase (30 – 300%) in CD.

Response: The low exit velocity model results demonstrate ambient water intrusion into the discharge opening. Based on the parameters (flow, depth and discharge pipe diameter) supplied in an excel file by OOC to the Agency dated July 5, 2011, a majority of produced water discharges in the Western Part of the OCS use the 0-500 bbl/d range and 0-5" pipe diameter to derive the critical dilution. The modeled parameters used were 500 bbl/d and 5" diameter port. Therefore, the model runs are using the upper bounds of the range which is a conservative and representative approach with respect to the produced water being discharged. Further, EPA notes that the 300% increase referred to in the comment is apparently the change from 0.05% to 0.20 % critical dilution for the >5-7" pipe diameter with 0-500 bbl/d discharge rate. Both critical dilutions are a fraction of 1% effluent mixed with more than 99% seawater and unlikely to provide any meaningful difference in the ability to comply. No change was made to the final permit.

(c) Commenter requested that the Addendum to the fact sheet be modified to cite the basis for changing the CORMIX modeling density gradient.

Response: The response to Comment 11.b. is also part of the administrative record. While the fact sheet has not been modified, EPA is including the information requested in this response as part of the administrative record.

The $0.182 \text{ kg/m}^3/\text{m}$ density gradient is approximately 90 percent of the average of the maximum density gradients observed as calculated using the June 2005 to March 2011 data set from the East and West Flower Garden Banks. The raw temperature and salinity data can be found at http://flowergarden.noaa.gov/document_library/scidocs/fgbwatertemps0511.pdf and http://flowergarden.noaa.gov/document_library/scidocs/fgbsalinity0511.pdf respectively. The corresponding densities were calculated based upon the international one atmosphere equation of state of seawater as published by Millero and Poisson in Deep-Sea Research, Vol. 28A, No.6, pp. 625-629, 1981. The density gradient represents both a conservative and representative value for use in the CORMIX dispersion model to determine critical dilutions at the edge of the 100 meter mixing zone.

Further, the Agency has reviewed both CSA(1985) "*Environmental Monitoring Program for Platform "A" Lease OCS-G 2759 High Island Area South Extension East Addition Block A-389 Near the East Flower Garden Bank. Volume I-III A final Report for Mobil Producing Texas and New Mexico Inc.*" and CSA(1988) "*Monitoring of Drillsite A in the Gainesville Area Block 707" A final Report for Sohio Production Company.*" The 1985 CSA document includes graphs of both salinity and temperature parameters during drilling surveys. Tabular data necessary to calculate the densities and the associated density gradient was not included in the 1985 CSA document

and associated appendices and therefore was not considered. The 1988 CSA document includes the tabular temperature and salinity data as well as the sigma-t for two days of monitoring (namely May 28th, 1985 and August 19th, 1985). These data were considered in the Agency's effort to substantiate a conservative and yet representative density gradient.

(d) Commenter requested that the Addendum to the fact sheet be modified to include modeling input information so a third party may reproduce the CD results.

Response: The response to Comment 11.b. is also part of the administrative record. While the fact sheet has not been modified, EPA is including the information requested in this response as part of the administrative record. For the ambient density inputs, a constant surface density of 1017 kg/m³ was used. Bottom densities of 1017.728, 1018.092, 1018.638, 1019.184, 1019.548, 1019.548, 1019.912, 1020.458, and 1020.822 kg/m³ were used for Tables 1-A, 1-B, 1-C, 1-D, 1-E, 1-F (12-14 m), 1F(>14-16 m), 1-F(>16 – 19 m), and 1-F(>19 m), respectively.

(e) Commenter requested that the permit allow discharges of methanol and ethylene glycol less than 200 bbl/d and waive toxicity test requirements for hydrate control fluids.

Response: The models were re-run and the concentrations calculated and compared to the NOEC's for growth and mortality listed for methanol and ethylene glycol in the submitted comment addenda. The modeling runs submitted to justify the 200 bbl/d value, model an exceedance of the NOEC in case 21 of the submitted modeling package for methanol. Further, the actual density of methanol cannot be input to CORMIX. In addition, the subsequent concentrations and possible synergistic effects posed by discharges of produced water and hydrate inhibitors are not substantiated by the comment. Therefore, based on the Agency's review of the modeling submitted and a suitable margin of safety, the Agency will waive toxicity test requirements for neat methanol less than 20 bbl/d and neat ethylene glycol less than 200 bbl/d. All other hydrate control fluids will meet the requirement of the permit as stated.

Comment 12 (Produced Water Toxicity in Part I.B.4.b.3):

(a) OOC supported the allowance of 2012 sampling data prior to the effective date of the permit for 2012 reporting.

Response: Comment is noted.

(b) OOC supported the use of equivalent pipe size to determine CD.

Response: Comment is noted.

(c) OOC supported the permit's inclusion of hydrate inhibitors in the representative sample provision.

Response: Comment is noted.

(d) OOC suggested the following revisions (with addition and ~~deletion~~): *If the permittee has been subject to quarterly testing and has been compliant with these toxicity limits for one full year (four consecutive quarters), the required testing frequency shall be reduced to once per calendar year. The highest estimated monthly flow rate recorded during that 12-month period will be the flow baseline for monitoring reduction purpose. During the reduced monitoring period, if the estimated monthly flow rate ~~discharge rates~~ increases more than 20% of the flow baseline and there is an increase in the critical dilution most recently tested, an additional tests*

is required for those discharges no later than the following quarter. If the test passes, the test frequency will remain the same as prior to the flow change. If the permittee monitored produced water toxicity at the reduced frequency of once per calendar year fails any test, the frequency shall be resumed to once per quarter. See Part I.D.3.e of this permit, if a test fails the survival or sub-lethal endpoint at the critical dilution in any test.

Response: EPA has modified the final permit language as suggested because test failure is addressed separately.

Comment 13 (Produced Water Characterization Study in Part I.B.4.c): OOC provided suggested permit language for produced water and drilling fluid studies, respectively. OOC also provided the following comments on the study.

(a) OOC requested that the phrase “but not limited to” be deleted because it is impractical from an enforcement perspective.

Response: The proposed permit specified a list of pollutants to be monitored, but does not prohibit the permittee from conducting a broader study scope. It was not EPA’s intent to use the phrase “but not limited to” for enforcement purposes. No change in the final permit is needed.

(b) OOC supported the option for permittees to conduct either individual monitoring or joint study.

Response: Comment is noted.

(c) OOC requested that participants in the joint study be allowed to develop a study plan.

Response: Comment is noted. EPA supports participants in a joint study developing a study plan to ensure representativeness across the entire permit area and maximize efficiency. Part I.B.1.d of the permit sets forth the general requirements for the study and acknowledges that participants may want to submit a study plan. The purpose of the study is to ensure the availability of more current information to conduct a reasonable potential (RP) screening against federal water quality criteria to determine whether discharges of produced water may cause or contribute to an exceedance of federal water quality criteria (WQC). The final permit provides permittees the option to submit a study plan subject to EPA’s approval for sampling locations and number of samples.

(d) Commenter noted that there are no marine WQC for aluminum or barium.

Response: The list of pollutants of concern to be monitored has been modified in the final permit to remove aluminum and barium. The final permit also specifies metal form (total, free, or dissolved) to be analyzed and reported consistent with WQC.

(e) Commenter requested that radium isotopes be removed from the drilling mud study because: (1) drilling operations are conducted to limit as much as possible the ingress of formation fluids into the wellbore; (2) drilling muds are only discharged during actual drilling operations; and (3) there are many reasons to believe that drilling muds are not a significant pathway for radium to reach the surface and analysis for this component should not be required.

Response: Comment noted. Because there is no WQC established for radium, the monitoring requirements for radium have been removed in the final permit.

(f) Commenter requested that monitoring of benzene be removed due to: (1) the volatility of

benzene that requires special sample preservation; and (2) the no free oil sheen requirement already limits the potential release of benzene.

Response: Comment noted. Because benzene is not listed in the most recent EPA's national recommended WQC for aquatic life, benzene has been removed from the monitoring list in the final permit.

(g) OOC noted some information has not been updated in the 2012 Ocean Discharge Criteria Evaluation (ODCE) document.

Response: Comments are noted. The following declaration (a typo was found in the draft permit) is given at the end of the document: "Declaration: This document is based on the previous EPA Region 6's document 'Ocean Discharge Criteria Evaluation for The NPDES General Permit for The Gulf of Mexico OCS,' July 1, 1991. All references in this document are listed in Chapter 11 of the 1991 document." Thus, the 2012 ODCE only summarizes findings from the previous determinations. EPA will update the ODCE with new WQC and new produced water and drilling fluids data.

Comment 14 (Produced Sand in Part I.B.5): OOC acknowledged that proppants are included in the definition of produced sand.

Response: Comment is noted.

Comment 15 (Excess Well Treatment Fluids in Part I.B.6): OOC requested that EPA allow discharges of unused fluids.

Response: Excess fluids were not authorized under the current permit and EPA declines to consider the authorization during this permit renewal process. However, if OOC provides more information on the nature, volumes, frequencies alternatives for disposal, and accumulative environmental effects of such additional discharges, particularly on endangered species, when taken together with the affects of the existing authorized discharges (i.e., produced water, miscellaneous discharges, etc.), EPA may reconsider the request during the next permit renewal process.

Comment 16 (Well Treatment Fluids Monitoring in Part I.B.6): For clarification, OOC suggested that the permit add the following sentence: "This discharge shall be considered produced water for monitoring purposes when commingled with produced water."

Response: The permit language has been revised and the suggested sentence is added to Part I.B.6. Monitoring requirements for free oil and oil and grease are covered by monitoring produced water in this case. Please note that the provision of prohibition of priority pollutants stated in section I.B.6 still applies to well treatment fluids, completion fluids, and workover fluids.

Comment 17 (Excess Cement Slurry- Miscellaneous Discharge in Part I.B.10): OOC requested that the permit authorize discharges of cement slurry used for equipment tests.

Response: Cement slurry used for equipment testing was not included in the current definition of

“Excess Cement Slurry,” which is limited to unused mixed cement after a cementing operation. EPA never officially authorized such discharges. The prohibition statement added to the new permit was a response to an operator’s request for clarification, but does not change the conditions from the previous permit. To the extent practicable, EPA recommends reuse of test batches in actual cementing operations to reduce materials and disposal costs, otherwise, alternative disposal methods would be needed. Please note that EPA does not have authority to authorize discharges under the CWA without going officially through the NPDES permitting process. Neither email nor telecommunication with a permit writer or an EPA staff member could be used as legal authorization of a discharge not already authorized by a permit. According to OOC’s estimate, authorizing the additional “excess” cement slurry would cause a 30 to 50 % increase of currently authorized discharges. EPA will reconsider the issue if OOC provides more environmental impact evaluation together with information on reuse and disposal alternatives, and also specifically evaluates the effects on federally listed endangered and threatened species. If storing the excess cement slurry would imminently endanger a person’s life or cause equipment/facility damage, the operator may exercise his/her best judgment whether the discharge would qualify as an “upset” as defined at 40 CFR §122.41(n) and handle the excess cement slurry under the provision of “upset” in Part II.B.5 of the permit.

Comment 18 (Chemically Treated Miscellaneous Discharge in Fact Sheet section VII.2): OOC suggested, for clarity, replacing the statement for chemically treated miscellaneous discharge with a statement for a 7-day toxicity test for subsea fluids discharge.

Response: Comment is noted. The “Miscellaneous Discharges” section in the fact sheet addressed both miscellaneous discharges with and without chemical treatments. It was EPA’s intent to state that chemically treated miscellaneous discharges shall comply with the 48-hour toxicity test prior to discharging. No change was made.

Comment 19 (Powdered Dyes in Part I.B.10.a): OOC supported pipeline brine conditions and requested clarification on the powdered dye toxicity test requirement.

Response: Comments are noted. EPA clarifies that for usage of powdered dyes, the NOEC limit is not 50 mg/l of dye-solvent mixture; rather, it is the maximum concentration of dye that can be applied for a leak test. For instance, if the NOEC is 25 mg/l for powdered Dye A, the final discharge from the leak test shall not contain more than 25 mg/l of powdered Dye A. So, the limit for powdered dye may vary depending on the product. No change was made.

Comment 20 (Seawater used for Dual Gradient Drilling in Part I.B.11): OOC supported discharges of seawater used for piping/equipment preservation fluids and Dual Gradient Drilling (DGD) and provided some DGD information for the record.

Response: Comments are noted. OOC had provided the same DGD information for consideration during the development of the draft permit. Discharges of seawater used as piping or equipment preservation fluids, and seawater used during Dual Gradient Drilling are authorized by this permit.

Comment 21 (Seawater treated with chlorine, hypochlorite, bromide in Part I.B.11.a.3):

(a) OOC requested that chlorine be excluded from toxicity testing as the current permit does.

Response: Final permit language has been revised to keep chlorine in the exclusion note for the toxicity test requirements.

(b) OOC provided information which justifies exclusion of the toxicity test for bromine.

Response: Information provided by OOC indicates bromine concentration in the firewater system ranges from 0.7 to 2.7 mg/l, and the bromide concentration in seawater ranges from 65 to over 80 mg/l. Also, OOC provided previous toxicity results that have shown NOECs above the permitted CD limit. Bromine has been added to the exclusion list.

(c) OOC requested that the permit language be revised to add ions generated by electric current to the toxicity exclusion list.

Response: The OOC did not provide data to support its expectation of no toxic impact for discharges of electrically generated ions such as copper and aluminum. EPA will reconsider the request during the next permit renewal process if OOC provides toxicity test results which can demonstrate no reasonable potential for toxicity in the discharged quantity.

Comment 22 (Toxicity Monitoring for Chemically Treated Miscellaneous Discharges in Part I.B.11.b): OOC suggested the following revision: *If the permittee has been compliant with this toxicity limit for one full year (12 consecutive months) for a continuous or routine intermittent discharge of chemically treated seawater or freshwater, the required testing frequency can be reduced to once per calendar year for that discharge. The highest estimated monthly flow rate recorded during that 12-month period will be the flow baseline for monitoring reduction purpose. During the reduced monitoring period, if the estimated monthly flow rate discharge rates increases more than 20% of the flow baseline and there is an increase in the critical dilution most recently tested, an additional tests is ~~are~~ required for those discharges no later than the following quarter but not to exceed the frequency listed above. If the test passes, the test frequency will remain the same as prior to the flow change. If any test fails during the reduced monitoring period, the above defined testing frequency resumes. See Part I.D.4.d) of this permit, if a test fails the survival endpoint at the critical dilution in any test.*

Response: A similar comment (Comment 12d) was made for produced water toxicity testing. The comment is accepted and the final permit incorporates the suggested revisions.

Comment 23 (Cooling Water Intake Structure in Part I.B.12):

(a) OOC requested clarification that the 2 MGD design capacity applies to the individual cooling water intake structure (CWIS) rather than the whole facility.

Response: The Federal Register, Vol. 71, No. 116 (p. 35006), states: “This final rule applies to new offshore and coastal oil and gas extraction facilities, which were specifically excluded from the Phase I new facility rule. New offshore and coastal oil and gas extraction facilities with a design intake flow threshold of greater than 2 million gallons per day (MGD) are subject to requirements similar to those under the Phase I rule. A new offshore or coastal oil and gas extraction facility is defined as any building, structure, facility, or installation that (1) meets the definition of a “new facility” in 40 CFR §125.83; (2) is regulated by either the Offshore or

Coastal subcategories of the Oil and Gas Extraction Point Source Category Effluent Guidelines in 40 CFR Part 435, Subpart A or Subpart D; and (3) commences construction after July 17, 2006. Any offshore or coastal oil and gas extraction facility that does not meet these three criteria is subject to section 316(b) requirements established by the permit writer on a case-by-case basis.” Thus, the 2 MGD rule applies to the whole facility, not the individual CWIS. Also, the regulation authorizes the permitting agency to apply the same requirements to any (including any new) offshore or coastal oil and gas extraction facility. Therefore, any new facility which is covered by this permit and has a total design intake flow greater than 2 MGD, is subject to Part I.B.12 of the permit.

(b) OOC supported the definition of “fixed facility” and suggested adding a definition for “non-fixed facility.”

Response: If a facility is not categorized as a “fixed facility” by definition, it will be categorized as a “non-fixed facility.” It is unnecessary to add a definition for “non-fixed facility.”

Comment 24 (New Facility Application Information in Part I.B.12.a): OOC requested to file a coverage request for new facilities at least 30 days prior to beginning operation so the permittee may have time to collect new facility information.

Response: OOC’s comment appears to conflict with their concern that requiring an NOI 30 days in advance may cost the permittee significant rental fees to keep a drilling facility idle because a drilling facility may be called for jobs between different lease blocks on short notice. Please note that filing an NOI is the only means to be covered by this permit and the coverage is effective upon the permittee’s filing. No coverage of this general permit (GMG290000) is required if a facility does not discharge or when a facility is operating as a means of transportation. The permittee should have information available when it files or updates its eNOI for the new facility. The suggested 30-day in advance requirement was not established in the final permit.

Comment 25 (CWIS Inspection in Part I.B.12.c): OOC supported the monthly inspection requirement.

Response: Comment is noted.

Comment 26 (CWIS Monitoring Requirements in Part I.B.12.c): OOC had several comments as discussed below.

(a) OOC requested that EPA add velocity monitoring for submerged intake structures under i(a) of each Part I.B.12.c.1, 2 and 3.

Response: The common title of these subsections is “Alternative to visual or remote inspection,” and it has been removed from the final permit. The purpose of this provision is to provide an alternative means to comply with the visual or remote inspection of CWIS in case personal safety or property damage becomes an issue when the permittee conducts such inspections. As stated above, EPA determined that monitoring devices other than ROVs or subsea cameras could be used for remote inspection. The permit requirements under “visual or remote inspection” differ from requirements established for “velocity monitoring.” The permittee may use any device, including differential pressure devices, to conduct monitoring of the screen. For

clarification purposes, the term “surface water” in this permit and in the 316(b) regulations means waters of the United States, which covers the whole OCS regardless of water depth.

(b) OOC requested that EPA change the flow monitoring frequency from continuous to daily because continuous monitoring may require significant upgrades to the existing flow system.

Response: EPA has revised the permit language. Daily monitoring frequency will be used for flow monitoring. EPA has also changed the frequency for screen monitoring to daily based on the same reason for changing flow monitoring.

(c) OOC noted that the proposed permit does not retain the technical options for velocity monitoring at surface and submerged intakes, which are present in the current permit.

Response: This permit does not restrict or limit the type of device or technology to be used for velocity monitoring. The permittee is free to use the current technology for velocity monitoring as long as the permittee can demonstrate compliance with the 0.5 ft/s intake velocity limit. As stated above, the term “surface water” in this permit and in the 316(b) regulations means waters of the United States, which covers the whole OCS regardless of water depth.

(d) OOC indicated that it is not clear how a permittee would quantify a 15% blockage based on visual observation.

Response: The subsection i(a) which contains the 15% blockage provision has been removed in the final permit.

(e) OOC supported the permit allowing downtime for maintenance of velocity monitoring device.

Response: Comment is noted.

(f) OOC expressed concerns about the phrase “low impingement season” in the following permit language: “Operators shall conduct the period maintenance during the expected low impingement season....”

Response: The referenced language is about planned periodic maintenance of the screen and any associated measuring device. Because the proposed condition may not be practicable to enforce without uniform, area-wide low impingement season timeframes that could be defined in advance, it has been deleted from the final permit. However, the operator shall exercise the best professional judgment when it schedules periodic maintenance if such maintenance requires temporary removal of screens. The deleted language has been replaced with: “Operators shall, to the extent practicable, schedule and perform maintenance of monitoring devices or screens so as to minimize increased entrainment and impingement due to maintenance activities (e.g., minimize duration of maintenance activities that would disable controls, try to schedule routine maintenance (as opposed to “as needed” in response to evidence of decreased effectiveness) around spawning seasons, etc.).”

(g) OOC requested for continued operations during removal of CWIS for maintenance and/or repairs.

Response: EPA acknowledges that continued operation of cooling water systems may be needed during the period of maintenance and/or repairs of screens. Permittees are reminded that this permit does not authorize any take of threatened or endangered species. The permittee shall

report to the National Marine Fisheries Service any take of endangered or threatened species. Also see EPA's response to item (f) above.

(h) OOC requested that routine biocide treatment of the velocity monitoring system be excluded from conditions established for chemically treated seawater.

Response: As requested, Part I.B.12.b.4 of the permit has been modified to exclude "in situ" biocide treatment of the velocity monitoring system, provided biocide use is minimized to what is only needed for effectiveness, and discharges are minimized. Please note that if the device is taken off and treated with chemicals on board, discharge of used chemicals is not authorized.

(i) OOC requested that the permittee be allowed to request entrainment monitoring frequency reduction after the 24-month monitoring period. OOC claimed the entrainment impact would be insignificant based on the one-year study results and it would be inappropriate for EPA to take time to review the results prior to extending the monitoring requirement.

Response: Because the industry has not completed the study within the 2-year time frame prior to the current permit expiration as planned, results were not available for use in the final permit decision. To reduce the monitoring burden, a quarterly entrainment monitoring frequency will be established after submittal of the 2-year entrainment monitoring study or one year after the effective date of the permit, whichever comes first. Entrained fish samples shall be collected from cooling water after the intake screen if feasible.

(j) OOC requested that permittees be allowed to participate in the joint study after the completion of the study.

Response: The following condition has been included in the final permit under Part I.B.12.a.2.i: "Operators may participate after the completion of the study."

Comment 27 (CWIS Reporting Requirements in Part I.B.12.d): OOC suggested that EPA remove the number of impinged fish and screen blockage percentage from the permit reporting requirements.

Response: The reporting requirement for number of fish impinged is needed for EPA to evaluate the impact and is required by the provision at 40 CFR §125.137, and it has been retained in the final permit. However, reporting requirements for CWIS are revised in accordance with EPA's response to OOC's Comment 26 as described above.

Comment 28 (Produced Water Toxicity Testing in Part I.D): OOC requested that EPA replace "reproduction" with "growth" as the sub-lethal end point used for Mysid shrimp.

Response: EPA concurs. The final permit has "growth" as the sub-lethal end point for Mysid shrimp.

Comment 29 (Spill Prevention Best Management Practices in Part II.B.7): OOC recommended that EPA not require the permittee to develop a BMP plan, but rather they be in compliance with 30 CFR Part 250.

Response: The BMP language is revised to read as follows: *Any permittee facility operator which develops, implements, and maintains spill prevention Best Management Practices (BMPs)*

that are is compliant with the ~~corresponding~~ standards and regulations promulgated at 30 CFR Part 250, et. seq., shall be deemed in compliance with the requirements of Part II.B.7.

Comment 30 (Monitoring Period in Part II.C.7): OOC recommended changing the annual monitoring period of October through September to a calendar year period.

Response: The final permit has been revised to include the calendar year as the annual monitoring period.

Comment 31 (Discharge Monitoring Report (DMR) and Other Reports in Part II.D.4): OOC had the following comments:

(a) OOC requested clarification on how facilities will be identified and what constitutes an “outfall”.

Response: A specific facility could be identified by the combination of the following information given to the eNOI: permittee’s permit number (i.e., GMG29xxxx), lease block number, and facility’s name and/or identification number. “Outfall” generally refers to a point where a discharge would enter a water of the U.S., but depending on the context, it can also refer to a point where a discharge that will enter a water of the U.S. either directly or indirectly is controlled or monitored (e.g, an internal outfall, a monitoring location after the last treatment unit, but prior to discharge leaving a facility and entering a jointly used conveyance to a water of the U.S. or entering a water of the U.S. at a location inaccessible for monitoring, etc.). An outfall feature is assigned to a specific type of discharge in this general permit for reporting purposes.

(b) OOC requested clarification on how the remaining data for the months before October 1, 2012 should be reported.

Response: The permittee needs to comply with the reporting requirements established in the 2007 issued permit for submittal of data prior to the effective date of the new permit coverage. This includes paper DMRs, entrainment study status reports, permit violation reports, etc.

(c) OOC requested that the permit provide for 60 days, instead of 30 days, to submit quarterly NetDMRs.

Response: OOC estimated that it would take 57 hours per year, which is 14.25 hours per reporting period, to file a NetDMR for 29 lease blocks. Since it may take more time to file the first NetDMR, the permit gives 3 months (by March 31, 2014) for permittees to report the first NetDMR, which covers the time period from the effective date of the new permit through December 31, 2013. Because permittees may manage their DMR in a spread sheet, they have the ability to update monitoring data as needed for each reporting period, and then upload by the due date. This reduces the burden of keying in every single data point for every quarter into the NetDMR. No change was made to the final permit.

(d) OOC requested that the permit provide 60 days for paper DMR submittal.

Response: EPA has modified the final permit based on this request. Paper DMRs may be submitted within 60 days after the reporting period, if paper DMRs are required.

(e) OOC requested that the permit allow permittees to submit a list of “no activity” facilities instead of a NetDMR for a no activity/no discharge facility.

Response: The NetDMR system allows permittees to “import” a list of “no discharge” facilities. Note that the first reporting under this permit using NetDMR is not due until March 31, 2014. EPA expects the system to be fully functioned by then.

(f) OOC requested that EPA work with industry on NetDMR system development.

Response: EPA will work with industry in pilot testing the system.

(g) OOC requested that the system allow for permittees to sign and submit multiple signatures, and for previous data to be saved and modified.

Response: Comment noted. The Net DMR system includes such features.

(h) OOC requested that EPA provide permittees with a NetDMR trial period and workshop specific to the GMG290000 NetDMR system.

Response: Comment noted. EPA will provide outreach/training on the new system prior to March 31, 2014, when the first NetDMRs are due.

Comment 32 (24-hour Reporting in Part II.D.7.a): OOC expressed their support for a quarterly follow-up report associated with the 24-hour reporting.

Response: Comment is noted. Please note that the oral reporting has been replaced with e-mail reporting in the final permit.

Comment 33 (Other Noncompliance in Part II.D.8): OOC requested that the term “lease holder or operator” be replaced with “permittee.”

Response: Comment noted. The term “permittee” is used throughout the final permit wherever appropriate.

Comment 34 (Definition of Blow-Out Preventer (BOP) Fluid in Part II.G.10): OOC supported the definition of BOP fluids including the fluid from the subsea wireline “grease-head.”

Response: Comment is noted.

Comment 35 (Definition of Hydrate Control Fluids in Part II.G.45): OOC recommended including “hydrate control fluids used in drilling equipment” in the definition of hydrate control fluids.

Response: EPA agrees and the definition in final permit has been modified to also reference drilling equipment.

Comment 36 (Definition of Operator in Part II.G.59): OOC referred to their Comment 2 on the definition of “operator” in Part I.A.2.

Response: Comment is noted. See EPA’s response to OOC’s Comment 2.

Comment 37 (Definition of Treatment Chemicals in Part II.G.83):

(a) OOC requested that EPA eliminate the following sentence from the definition to reduce confusion: “*Also, chlorine generated using an electric current rather than added is not considered a treatment chemical.*” **Response:** EPA agrees and the sentence has been deleted in the final permit.

(b) OOC requested that hydrate control fluids be added to the list of excluded treatment chemicals.

Response: The discharge of hydrate control fluids is not listed and regulated as chemically treated seawater and thus is not subject to quantity limitations set forth for treatment chemicals. The discharge of hydrate control fluids is regulated with specific limitations and monitoring requirements under Part I.B.10 of the permit.

Comment 38 (Definition of Uncontaminated Ballast/Bilge Water in Part II.G.84): OOC stated that it is unclear what is meant by “contact with” because minimal indirect contact with oil or chemicals could occur even if the discharge meets the limitations for miscellaneous discharges.

Response: EPA realizes that it may not be possible for bilge water to avoid contact with oil or chemicals in the offshore vessel/facility. The operator shall keep good house-keeping practices to minimize potential contact of oil or chemicals with ballast water, bilge water, seawater or freshwater. To address OOC’s concern, the term “direct contact” is used in the final permit. Also, for clarity, the last phrase is revised to reflect EPA’s intent that if contaminated water passes through an oil or chemical removal process, it would be considered uncontaminated water. The revised definition reads as: “‘*Uncontaminated Ballast/Bilge Water*’ means seawater added or removed to maintain proper draft (ballast water) or water from a variety of sources that accumulates in the lowest part of the vessel/facility (bilge water) without direct contact with or the addition of chemicals, oil, or other wastes; or ballast/bilge water after being treated to comply with the bilgewater effluent requirements established in the Vessel General Permit prior to discharge.”

Comment 39 (Definition of Uncontaminated Freshwater in Part II.G.85): OOC requested to delete the term “contact” from the following definition: “Uncontaminated Freshwater means freshwater which is discharged without the addition or contact of treatment chemicals, oil, or other wastes.” OOC also requested to add “water used for pressure test or flush existing piping or pipelines” into the definition.

Response: The term “contact” has been replaced with “direct contact” in the definition. Please note that EPA is not adding “water used to pressure or flush existing piping or pipelines” to the definition of uncontaminated freshwater. EPA did not include “existing” piping or pipelines in the current definition, implying that water that had a direct contact with oil or chemicals in the piping or pipelines was not considered uncontaminated.

Comment 40 (Definition of Uncontaminated Seawater in Part II.G.86): OOC requested to delete the term “contact” from the following definition: “Uncontaminated Seawater means seawater

which is discharged without the addition or contact of treatment chemicals, oil, or other wastes.”

Response: The term “contact” has been replaced with “direct contact” in the definition.

Comment 41 (Table 1 of Appendix E): OOC requested that EPA add additional information to the Effluent Limitation Summary Table to reflect changes made for hydrate control fluids.

Response: Comment noted. Additional information has been added to Table 1 of Appendix E to reflect the changes.

Comment 42 (Retention of Records in Part II.C.3): OOC requested that the permit allow for records to be scanned and saved electronically and that electronic copies be acceptable for inspector’s review.

Response: EPA has revised the permit to reflect the request.

Comment 43 (Deck Drainage in Fact Sheet and Permit Part I.B.3): OOC provided information to justify the use of biocide for sump/drain systems to meet the proper operation and maintenance requirements (over and above other cleaning options) of BOEM regulations and the NPDES permit, prevent permit noncompliances, and present minimal risk to the marine environment. The commenter also noted that it is impractical to sample these discharges.

Response: A note which allows the use of biocides has been added to the final permit. However, the definition of deck drainage, which must be consistent with the definition at 40 CFR §435.11(g), is not changed.

Comment 44 (Miscellaneous Discharges in Part I.B.10): OOC requested that the permit add Aqueous Film Forming Foam (AFFF) associated with regulatory certification and inspection.

Response: EPA recognizes the desirability of using AFFF as a fire fighting agent for certain classes of fire. Therefore, the permit requirements for AFFF do not apply when the discharge occurs during a fire emergency. The permit adopts the discharge restriction established in the EPA issued Vessel General Permit. AFFF has been added to the list of “Miscellaneous Discharges” with restrictions.

Comment 45 (New Source Exemption): OOC requested that the permit reinstall the New Source Exemption (NSE) language.

Response: The NSE does not have any material effect because the protection period since the current NSPS’s were promulgated has expired and the current New Source Performance Standards (NSPS) are not more stringent than the Best Technology Available that also apply. If, in the future, EPA promulgates more stringent NSPS, those new limits could not be added to the permit without a major modification, at which time EPA could reinstate the NSE wherever appropriate and offer the opportunity for public comment. The permit language has not been revised.

ADDITIONAL CHANGES:

1. In order to ensure existing dischargers under the 2007 permit have time to review new permit conditions, those permittees will only be required to comply with the permit conditions after submitting an eNOI. New discharges that were never authorized under the 2007 permit must comply with the conditions of this permit as of the effective date of their coverage after submitting an eNOI/NOI.

2. In preparing the final permit, typographical /formatting errors that would not result in substantial changes have also been corrected.

Table - 1: Permit Coverage Map

