Permit No.: AKG-28-8100

United States Environmental Protection Agency (EPA)
Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
FOR OIL AND GAS EXPLORATION FACILITIES
ON THE OUTER CONTINENTAL SHELF IN THE CHUKCHI SEA

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq*., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act," the following discharges:

Discharge Number	Discharge Description
001	Water-Based Drilling Fluids and Drill Cuttings
002	Deck Drainage
003	Sanitary Wastes
004	Domestic Wastes
005	Desalination Unit Wastes
006	Blowout Preventer Fluid
007	Boiler Blowdown
008	Fire Control System Test Water
009	Non-contact Cooling Water
010	Uncontaminated Ballast Water
011	Bilge Water
012	Excess Cement Slurry
013	Muds, Cuttings, Cement at the Seafloor

are authorized from **oil and gas exploratory facilities** to offshore areas in Alaska located in the Chukchi Sea as defined in this general permit as the Area of Coverage (see Section I.B) in accordance with the effluent limitations, monitoring requirements, and other conditions set forth herein.

This general permit shall become effective **DATE**

This general permit and the authorization to discharge shall expire at midnight, **DATE**

If the permittee intends to continue exploratory facility operations and discharges beyond the term of this general permit, the permittee must reapply for a permit at least 180 days before the expiration of this general permit (see Section VI.B., Duty to Reapply).

Signed this day of

DRAFT PERMIT
Michael A. Bussell, Director
Office of Water and Watersheds

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Schedule of Submissions. The following table summarizes some of the submissions required under the general permit. The permittee is responsible for all submissions and activities even if they are not summarized below.

Permit Sections	Page No.	Submissions and Notification Requirements	Due Dates
REPORTS/INFORMATION			
I.C.1. & I.C.2.; Attachment 1	10	Notice of Intent (NOI) and required NOI submissions	At least 120 days prior to initiation of discharges.
I.D.	11	Transfer of Permit Authorization	As applicable.
I.E.4.; IV.A.	12, 53	Quality Assurance Project Plan (QAPP)	Must be completed within 90 days of receiving authorization to discharge and prior to the pre-drilling monitoring required in II.A.12. The QAPP must be kept onsite.
I.E.5.; IV.B.	12, 54	Best Management Practices (BMP) Plan	Must be completed and onsite at least 7 days prior to discharging any authorized discharges. The BMP Plan must be kept onsite.
II.A.10.b.	17	Chemical Additives Use Inventory	The inventory of chemical additive used must be submitted along with the End-of-Well Report (Section II.A.13).
II.A.12.c.	18	Environmental Monitoring Program (EMP) Plan of Study	Submit with NOI.
II.A.12.e.6.	24	Submit Whole Effluent Toxicity (WET) results with Discharge Monitoring Reports (DMRs)	The permittee must submit the full WET laboratory report and results of WET tests with the DMR for the month following sample collection.
II.A.12.f.1.	25	EMP Report #1	No later than June 1 of the year following drilling site operation cessation.
II.A.12.f.2.	25	EMP Report #2	No later than June1 of the year following completion of all drilling site monitoring.
II.A.12.f.3.	25	Revised EMP Report	If required, the permittee must complete the revisions and submit a revised report within 60 days of the date of the request or within the time period identified by the permitting

			authority, whichever time period is longer.
II.A.13.	27	End-of-Well Report	Within 90 days of ceasing exploratory facility operations and all authorized discharges.
II.A.14.	27	Well Number Limitations	Submit NOI(s) and related documentation, as applicable, if the permittee proposes drilling discharges from more than five wells in a lease block.
II.B.6.b.	30	Mineral Oil Pill	Report required information within 60 days of the discharge if drilling fluid containing residual mineral pill oil (after pill and buffer removal) is discharged.
II.D.4.	36	Marine Sanitation Device (MSD) Annual Testing	Note on the December DMR the results of the MSD test.
III.B.	49	NetDMR	No later than the 10th of the month following the completed reporting period.
IV.C.	59	Drilling Fluid Plan	Submit with NOI. A copy of the Plan must be kept onsite.
VI.B.	66	Duty to Reapply (Application Renewal)	No later than 180 days from the expiration date of the general permit.
VI.C.	67	Duty to Provide Information	As specified in the request for information.
NOTIFICATIONS			
I.C.5.; I.E.1.	11	Prior to Initiation of Discharges	7 days prior to initiation of any discharge at authorized drill sites.
I.E.2.	11	Discharge 001 Cessation	Within 7 days of ceasing all discharges of water-based drilling fluids and drill cuttings at a site.
I.E.3.	12	Facility Operations and Authorized Discharge Cessation	Within 30 days of ceasing exploratory facility operations and all authorized discharges at a drilling site.
I.E.6.	12	Permit Coverage Termination	When general permit coverage is no longer needed at a drilling site.

III.G.1.a. & III.G.1.b.	50, 51	Twenty-Four Hour Notice of Noncompliance	Telephone notice within 24 hours from the time from the time the permittee becomes aware of the noncompliance.
III.G.1.c.	51	Written Notice of Noncompliance	Written notice within 5 days of the time the permittee becomes aware of the noncompliance.
III.G.2.	51	Other noncompliance	Report all noncompliance not required under III.G.1.a. and III.G.1.b. with the DMRs.
III.H.	52	Changes in Discharge of Toxic Substances	Submit a notification as soon as the permittee becomes aware of a discharge not limited in the general permit.
III.I.	53	Compliance Schedules	No later than 14 days following each compliance schedule date.
IV.B.5.b. and IV.B.7. and 8.	57, 59	BMP Annual Certification and Certification of Changes	Must be submitted with the December DMR.
V.A.	61	Duty to Comply	Submit a notification as soon as any planned changes in the facility or activities that may result in noncompliance with general permit requirements.
V.F.2.a.	63	Anticipated Bypass	At least 10 days before the date of the bypass.
V.F.2.b.	64	Unanticipated Bypass	See Section III.G.
V.I.	65	Planned Changes	As soon as possible of any planned physical changes to the permitted facility.
V.J.	65	Anticipated Noncompliance	Advance notice of planned changes that may result in noncompliance.
VI.E.3.	68	Changes to Authorization	Prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

I. APPLICABILITY AND NOTIFICATION REQUIREMENTS

A. Sources. This general permit authorizes discharges from facilities engaged in field exploration and drilling activities under the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR Part 435, Subpart A).

B. Area of Coverage. This general permit covers the area of federal waters of the U.S. in the Chukchi Sea, as shown in Figure 1. The area of coverage includes final leases and leases that could be sold and/or finalized during the five-year term of this general permit.

C. Authorization to Discharge.

1. Applicants seeking coverage under this general permit must submit a Notice of Intent (NOI) to the U.S. Environmental Protection Agency (EPA) Region 10 Director of the Office of Water and Watersheds (Director) at least 120 days prior to initiation of discharges. Applicants must submit an NOI for each proposed drilling site. Only complete NOIs will be considered by EPA. A complete NOI must contain the information provided in Attachment 1 of this general permit. The applicant must use the NOI information sheet in Attachment 1 as part of their NOI submittal. In addition, each NOI must be signed in accordance with the Signatory Requirements of Section VI.E. of this general permit.

2. Along with the complete NOI, an applicant must submit to EPA copies of any exploration plans, biological surveys, and/or environmental reports required by other regulatory agencies that will permit or otherwise authorize the operation of the exploration facility the applicant seeks to cover under this general permit. This requirement may be waived where an NOI is submitted pursuant Section VI.B., the Duty to Reapply provision.

3. Applicants are authorized to discharge under this general permit as of the date of written notification that the Director has authorized the discharge and assigned the applicant a general permit number. Once authorized, a permittee may discharge during the effective period of this general permit and in accordance with the limits and conditions set forth herein. This general permit authorizes the discharge of only those pollutants that are expressly identified in a permit application or NOI and that are discharged from exploratory facility operations.

4. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by the general permit. If the Director determines the

source may be covered under this general permit, the general permit will apply to the source upon revocation of the individual permit.

5. Once authorized to discharge, a permittee must notify the Director, in writing, 7 days prior to initiation of any discharge. The notification must include the latitude and longitude of the well location, well name and number, the type and name of exploratory facility, the general permit number, provide the initial date of discharges and expected duration of operations at each drilling site, and a certification that the discharge location is not within 200 meters of any other drilling site that was authorized under an NPDES permit. The notification described in this paragraph must be signed in accordance with the Signatory Requirements of Section VI.E. of this general permit.

D. Transfers.

1. Authorization under this general permit is not transferable to any person or entity unless:
    a. a written request for transfer is submitted to the Director; and
    b. a written notification of approval is received from the Director.
2. Transfers under this general permit will only be authorized for an existing exploratory facility located at the drilling site identified in the original NOI. If a different exploratory facility will be used, a new NOI for coverage of that exploratory facility under this general permit must be submitted to the Director.

E. Notifications.

1. **Prior to Initiation of Discharges.** The permittee must notify the Director, in writing, 7 days prior to initiation of any discharge at an authorized drilling site (Section I.C.5.). The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

2. **Discharge 001 Cessation.** The permittee must notify the Director, in writing, within 7 days of ceasing all discharges of water-based drilling fluids and drill cuttings (i.e., Discharge 001) at a drilling site. The notification must include the well name and number, general permit number, the total duration and date of final discharge of water-based drilling fluids and drill cuttings. The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

3. **Facility Operations and Authorized Discharge Cessation.** The permittee must notify the Director, in writing, within 30 days of ceasing exploratory facility operations and all authorized discharges at a drilling site. The notification must include the well name and number, general permit number, and the date of final facility operations and discharge cessation. The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

4. **Quality Assurance Project Plan.** The permittee must notify the Director, in writing, within 90 days following written notification that the Director has authorized discharge under this general permit, that the Quality Assurance Project Plan (QAPP) is complete and the date it was completed. The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

5. **Best Management Practices Plan.** The permittee must notify the Director, in writing, that the Best Management Practices (BMP) Plan is complete and on-site at least 7 days prior to any authorized discharge under this general permit. The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

6. **Permit Coverage Termination.** The permittee must notify the Director, in writing, when general permit coverage is no longer needed at a drilling site described by the NOI. This notification may be submitted after submission of the final Environmental Monitoring Program (EMP) report required under Section II.A.12.f. and if modifications are not required under Section II.A.12.g. The permittee must certify in the notification that it is not subject to any pending enforcement actions including citizen suits brought under state or federal laws. The notification must include the well name and number, general permit number, and the date that the permittee submitted the final EMP report. The notification described in this paragraph must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

F. Submission of Information.

1. The applicant/permittee must submit legible originals of all NOIs, EMP reports (Section II.A.12.f.), and notifications to the Director at the following address:

   Director, Office of Water and Watersheds
   United States Environmental Protection Agency, Region 10
   1200 Sixth Avenue, Suite 900, **OWW-130**
   Seattle, Washington 98101

   Copies must be sent to EPA's Alaska Operations Office at the following address:

   EPA – Alaska Operations Office
   Oil and Gas Sector
   222 West 7th Avenue, #19
   Anchorage, Alaska 99513

2. The permittee must submit all discharge monitoring reports (DMRs), other reports required by this general permit (except EMP reports required by Section II.A.12.f.), and all notices of noncompliance electronically using NetDMR (see Section III.B.).

G. Requirements for an Individual Permit.

1. In accordance with 40 CFR 122.28(b)(3), the Director may require any permittee discharging under the authority of this general permit to apply for an individual NPDES permit if he or she determines that any of the following conditions, including but not limited to those listed below:

   a. The discharger is not in compliance with the conditions of this general NPDES permit;

   b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

   c. A Water Quality Management Plan containing requirements applicable to such a point source is approved;

   d. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under this general permit, or either a temporary or permanent

reduction or elimination of the authorized discharge is necessary; or

e. The discharge(s) is a significant contributor of pollutants.

2. The Director may require any owner or operator authorized by this general permit to apply for an individual NPDES permit only if the permittee has been notified in writing that an individual permit application is required.

3. Any permittee authorized by this general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The permittee must submit an individual permit application with reasons supporting the request to the Director at the address in Section I.F. no later than 90 days after the publication by the Director of the general permit in the Federal Register. Upon issuance of an individual NPDES permit, the permittee's coverage (if authorized) under this general permit will be automatically terminated on the effective date of the individual permit.

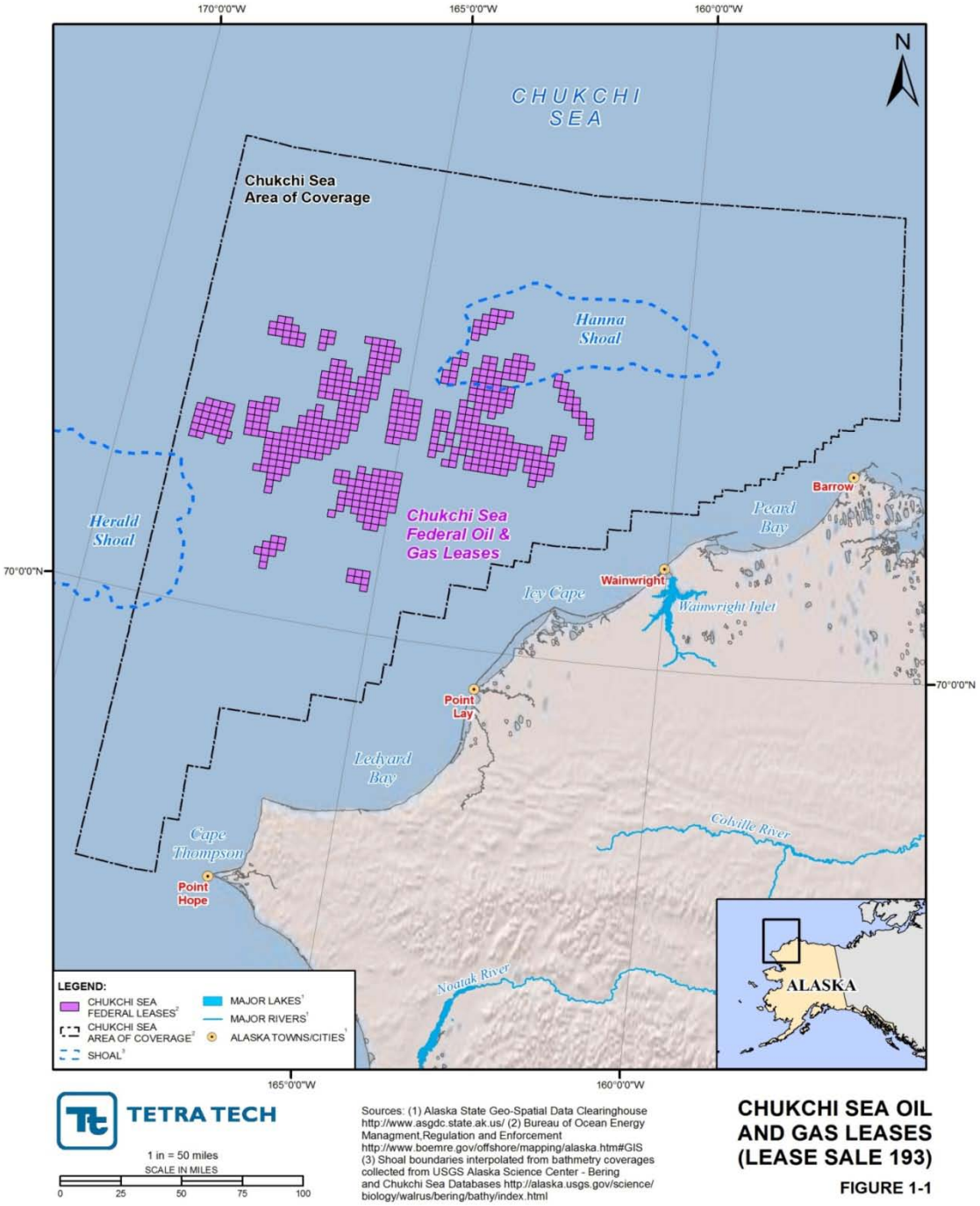

Figure 1. Area of Coverage for Offshore Oil and Gas Exploration Facilities in the Chukchi Sea

II. LIMITATIONS AND MONITORING REQUIREMENTS

A. Requirements for All Discharges.

1. During the effective period of this general permit, the permittee is authorized to discharge pollutants from those discharges indicated in its discharge authorization to the Chukchi Sea (see Figure 1), within the limits and subject to the conditions set forth herein.

2. This general permit authorizes the discharge of only those pollutants that are expressly identified in a permit application or NOI, and that are discharged from exploratory facility operation.

3. All effluent samples collected from any effluent stream must be taken after the last treatment unit and before discharge into receiving waters, except as otherwise required by discharge-specific provisions of this general permit.

4. The permittee must comply with the effluent limits in this general permit at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of the general permit.

5. Unless specifically addressed in this general permit, the permittee is prohibited from discharging floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind.

6. The permittee must minimize the discharge of surfactants, dispersants, and detergents. The discharge of dispersants to marine waters in response to oil or other hazardous waste spills is not authorized by this general permit. The permittee must report all discharges of surfactants, dispersants, and detergents in accordance with Section III.G. of the general permit.

7. The permittee is prohibited from discharging diesel oil, halogenated phenol compounds, trisodium nitrilotriacetic acid, sodium chromate, or sodium dichromate.

8. If any discharges are commingled, the most stringent effluent limitations among the individual discharges are applied to the resulting comingled discharge. If an individual discharge is not authorized, the commingled discharge is not authorized or is otherwise prohibited under this general permit.

9. When visual monitoring is required, the permittee must conduct visual monitoring of the receiving water surface in the vicinity of the outfall(s) at a time of maximum estimated or measured discharge.

10. Chemical Additives Use Inventory and Limitations.

    a. The concentration of chemical additives (e.g., treatment chemicals, biocides, corrosion inhibiters, etc.) in any authorized discharge (i.e., Discharges 001–013) must not exceed the most stringent of the following two limitations:

        1. the maximum concentrations and any other conditions specified in the EPA product registration labeling if the chemical is an EPA registered product; or

        2. the maximum manufacturer's recommended concentration.

    b. The permittee must keep an inventory of chemical additives used for Discharges 001–013. The inventory of chemical additives used must include the commercial product names, the EPA registration number, constituents, total quantities used, rates of use, where in the process they are used, and calculated maximum concentrations in any discharged waste stream. The calculations of maximum concentrations must be based on the amount of chemical additives added to the volume of the waste stream discharged. The permittee must include the chemical additive implementation procedures, calculation methods, and record keeping and reporting procedures in the BMP Plan. The inventory of chemical additive used and documentation of each additive's concentration determinations and limitation compliance must be submitted along with the End-of-Well Report (Section II.A.13.).

11. Permit Restrictions. The permittee is prohibited from discharging in areas where the water depth is less than 5 meters (as measured from mean lower low water (MLLW)).

12. Environmental Monitoring Program. The permittee must design and implement an environmental monitoring program (EMP) at each drilling site that meets the following goals, objectives and other requirements. The permittee must include the requirements from Section II.B.3. of this general permit in the EMP if the permittee is authorized to discharge water-based drilling fluids and drill cuttings. The permittee may propose to use EMP-derived information from different drilling sites subject to the conditions and the Director's approval in accordance with Section II.A.12.h., below.

a. Goals:

1. assessment of authorized discharges to evaluate potential impacts on water, sediment and biological quality;
2. implementation of the EMP through four phases to assess the impacts of oil and gas exploration to the marine environment through time;
3. protection of the marine environment; and
4. collection of data during this permit term for use in future permit development.

b. Objectives:

1. complete an initial site assessment, including physical sea bottom survey, to ensure the exploratory facility is not located or anchored in a sensitive biological area;
2. evaluate water quality characteristics of specified discharges;
3. evaluate sediment characteristics of the seafloor and potential effects of the discharges on these sediment characteristics;
4. evaluate potential effects to the benthic community structure due to deposition of Discharge 001 (water-based drilling fluids and drill cuttings) and Discharge 013 (muds, cuttings, cement at the seafloor). This includes both spatial and temporal changes in community diversity and abundance; and
5. evaluate the plume(s) in the vicinity of the discharges.

c. Plan of Study. The applicant must submit an EMP plan of study to the Director for review with the NOI. The plan of study should include the permittee's EMP design and detailed scope of work. The applicant must incorporate any changes to the EMP Plan of Study required by the Director, which will be included in the discharge authorization letter. The EMP must address the EMP goals, objectives and main components, as applicable, for the four stages: (1) baseline site characterization; (2) during active drilling ; (3) post-drilling; and (4) no later than 15 months after drilling operations cease at a drilling site. A plan of study must include the following:

1. the EMP goals, objectives and main components;
2. a statistically valid sampling design;
3. all monitoring and modeling procedures and methods;
4. a quality assurance project plan (see Section IV.A.);
5. a detailed discussion of how data will be used to meet, test, and evaluate the EMP objectives; and

6. a summary of the results of previous environmental monitoring at or near the drilling site that is relevant to the EMP goals and objectives.

d. EMP Elements:

1. Dilution, Plume and Deposition Modeling. Conduct data collection to inform site-specific models of plume and sediment deposition, and conduct model simulations that account for the observed range of receiving water conditions and effluent flow rates. Data collection must capture the range of conditions in the receiving water that affect fate and transport of pollutants (e.g., high and low measured currents, etc.). Model inputs must address facility-specific discharge configurations (e.g., outfall locations, outfall depths from surface, port size, port orientation, etc.). All modeling reports must be submitted to the Director along with the EMP Plan of Study (Section II.A.12.c.). The modeling assessments must be conducted for the following:

    a. turbidity/total suspended solids associated with Discharges 001 and 013 (water-based drilling fluids and drill cuttings; and muds, cuttings, cement at the seafloor);

    b. temperature associated with Discharge 009 (non-contact cooling water); and

    c. deposition characteristics (e.g., areal extent, thickness, quantities, etc.) of cuttings, sediments, solids, particulates, etc., associated with Discharges 001 and 013.

2. Phases. The permittee must design and implement an EMP at each drilling site during the following four phases:

    Phase I – Baseline site characterization;
    Phase II – During active drilling
    Phase III – Post-drilling; and
    Phase IV – No later than 15 months after drilling operations cease at the drilling site.

3. Main components. The EMP must contain the following main components for each phase:

a. **Phase I Assessment**

i. Initial Site Physical Sea Bottom Survey. To ensure the drilling site is not located in or near a sensitive marine environment, an assessment of the physical sea bottom survey must be conducted before initiating discharges authorized by the general permit. The survey should provide both a physical and visual characterization of the seafloor.

ii. Physical Characteristics. Collect physical data to characterize the conditions of the drilling site and receiving waters. These physical data include surface wind speed and direction, current speed and direction throughout the water column, water temperature, salinity, depth, and turbidity.

iii. Receiving Water Chemistry and Characteristics. Collect water chemistry data to characterize the receiving waters. This monitoring should include an assessment of pollutants that are expected to be present in discharge effluent and there are federal water quality criteria and/or state water quality standards. These parameters should include dissolved metals, pH, turbidity, total suspended solids, bacteria, total aqueous hydrocarbons, and total aromatic hydrocarbons. The metals monitoring must include, at a minimum, the metal contaminants of concern below. The permittee may propose an alternative list based on site-specific data.

Table A – Metal Contaminants of Concern	
Aluminum	Mercury (total/methyl)
Antimony	Nickel
Arsenic	Selenium
Barium	Silver
Beryllium	Thallium
Cadmium	Tin
Chromium	Titanium
Copper	Zinc
Iron	Lead

iv. Benthic Community Structure. Describe the composition of the drilling site's benthic community (infaunal and epifaunal invertebrates, bivalves, and crustaceans).

b. **Phase II Assessment**

i. Effluent Toxicity Characterization. Toxicity analysis of the following discharges: 002 (deck drainage); 005 (desalination unit wastes); 007 (boiler blowdown); 008 (fire control system test water); 009 (non-contact cooling water); and 011 (bilge water). The effluent toxicity testing requirements consist of a tiered approach, i.e., use of rapid automated toxicity testing system as an initial screening method, followed with whole effluent toxicity testing (WET) if: (1) any initial screening method test shows potential toxicity; or (2) once per well, if the discharges exceed 10,000 gallons during any 24-hour period and if chemicals are added or may exist in the system (see Section II.A.12.e.). The initial screening must be conducted four (4) times per well at intervals that are designed to obtain a representative assessment of the discharge's toxicity.

ii. Discharge 009 (non-contact cooling water) Plume and Water Column Monitoring. Monitor temperature of the receiving water column and discharge plume to refine the modeling predictions (Section II.A.12.d.1.). The plume monitoring must be conducted during the maximum discharge rate and must be conducted at locations where the discharge would be predicted to cause measurable temperature changes from ambient conditions. To the maximum extent possible, the permittee must collect observations for potential marine mammal deflection during periods of maximum discharge.

c. **Phase III Assessment**

i. Physical Sea Bottom Survey. The survey should provide both a physical and visual characterization of the seafloor to assess the drilling site condition. The survey should map the areal extent and depth/thickness of solids deposition caused by Discharges 001 and 013. The survey should be designed to assess and refine the predictions from applicable modeling, i.e., correlate the actual sea bottom depositions with the deposition predictions for thickness, quantity and areal extent. (Section II.A.12.d.1.)

d. **Phase IV Assessment**

i. Physical Sea Bottom Survey. See Section II.A.12.d.3.c.i., above.

ii. Benthic Community Structure. See Section II.A.12.d.3.a.iv., above.

e. Whole Effluent Toxicity Testing. The permittee must conduct short-term chronic WET tests in accordance with the following requirements for the applicable discharges that: (1) exceed a flow rate or volume greater than 10,000 gallons during any 24-hour period and if chemicals are added or may exist in the system; or (2) that show potential toxicity during any initial screening method test completed in accordance with Section II.A.12.d.3.b.i.

The permittee must conduct WET tests on grab samples of the effluent. A split of each sample will be collected and analyzed for the chemical and physical parameters identified within the applicable monitoring sections of this general permit.

1. Chronic Test Species and Methods. The permitee must conduct the following three short-term chronic WET tests on each sample, using the following species and protocols:

Marine Chronic Toxicity Tests	**Species**	**Method**
Topsmelt 7-day larval survival and growth test*	*Atherinops affinis**	EPA/600/R-95/136 *
Mysid shrimp 7-day survival, growth, and fecundity test	*Americamysis bahia (*formerly *Mysidopsis bahia)*	EPA-821-R-02-014
Purple sea urchin 72-hour larval survival and development test	*Strongylocentrotus purpuratus*	EPA/600/R-95/136

*NOTE: In the event the topsmelt is unavailable, the inland silverside (*M. beryllina*) larval survival and growth method may be used as a substitute. The test is method 1006.0 in EPA-821-R-02-014. The use of the substitute species will be reported in the next DMR.

2. The presence of chronic toxicity must be determined as specified in the methods manuals corresponding to the individual testing protocols and identified in II.A.12.e.1. above.

3. Results must be reported in TU_c (chronic toxic units) which are defined as follows:

a. For all chronic survival endpoints, $TU_c = 100/NOEC$

b. NOEC means "no observed effect concentration." The NOEC is the highest concentration of toxicant, expressed in percent effluent, to which organisms are exposed in a chronic toxicity test [full life-cycle or partial life-cycle (short-term) test], that causes no observable effects on the test organisms (i.e., the highest concentration of effluent in which the values of the observed responses are not statistically significantly different from the controls).

c. For all other chronic test endpoints, $TU_c = 100/IC_{25}$

d. IC_{25} means "25% inhibition concentration." The IC_{25} is a point estimate of the toxicant concentration, expressed in percent effluent, that causes a 25% reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Model).

4. For the topsmelt (or inland silverside) and mysid tests, daily observations of mortality must also be taken to establish the 24-h, 48-h, and 96-h LC_{50}. LC_{50} is the concentration of a toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.

5. Quality Assurance.

a. The toxicity testing on each organism must include a series of five test dilutions and a control. If no mixing zone or dilution is authorized, the test dilutions shall be 100, 50, 25, 12.5, and 6.25% effluent. If a mixing zone and/or dilution ratio is authorized, the test dilution series must include the receiving water concentration (RWC), which is the effluent concentration associated with the authorized dilution ratio (i.e., the effluent concentration at the edge of the mixing zone), two dilutions above the RWC, and two dilutions below the RWC. If the addition of brine solution or dry salts is necessary to adjust the salinity of the effluent, it may not be possible to achieve 100% effluent as one of the test concentrations. If this occurs, the maximum effluent concentration achievable after salinity adjustment will be used as a substitute for 100% effluent, and this will be documented in the next WET report. The other test concentrations shall remain the same.

b. All quality assurance, test acceptability criteria, and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with the methods manuals and individual testing protocols. Toxicity tests which do not meet the quality assurance or test acceptability criteria shall be repeated using fresh effluent samples. Effluent samples collected for re-testing will coincide with the next applicable discharge event.

c. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:

i. If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.

ii. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the permittee must re-sample and re-test as soon as possible.

iii. Control and dilution water must be receiving water or lab water, as appropriate, as described in the methods manuals. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of the Director. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

6. Reporting. The permittee must submit the full WET laboratory report and results of WET tests with the DMR for the month following sample collection. The report of toxicity test results must include all relevant information outlined in the report preparation section of the testing manuals. In addition to toxicity test results, the permittee must report: dates of sample collection and initiation of each test; effluent flow rate at the time of sample collection (i.e., 24-hour rate or volume); and the results of the required concurrent monitoring.

f. EMP Reports. The permittee must submit two EMP reports to the Director.

1. The permittee must submit the first EMP report no later than June 1 of the year following drilling site operation cessation. The first EMP report must contain a preliminary analysis of the baseline site characterization, during active drilling operations, and post-drilling conditions.

2. The permittee must submit the second EMP report no later than June 1 of the year following completion of all drilling site monitoring. The second EMP report must contain the following information:

    a. summary of the results of all stages of environmental monitoring for each EMP main component;
    b. discussion of how the EMP goals and objectives were accomplished;
    c. analytical test methods used for data analysis;
    d. description of any impacts of the effluent on observed sediment pollutant concentration, sediment quality, water quality, and the benthic community;
    e. description of the data, evaluations and determinations with regard to each EMP main component; and
    f. all relevant quality assurance/quality control (QA/QC) information including, but not limited to, laboratory instrumentation, laboratory procedures, analytical method detection limits, analytical method precision requirements, and sample collection methodology.

3. If the Director requires revisions to any EMP report, the permittee must complete the revisions and submit a revised report to the Director within 60 days of the date of the request or within the time period identified by the Director, whichever time period is longer.

g. Implementation and Modification. The EMP may be modified if the Director determines that the modification is appropriate. Modifications to the EMP may include changes in sampling location, changes in sample frequency, or changes to parameters to be monitored.

h. EMP at Subsequent Drilling Site. The permittee may propose in its EMP plan of study for subsequent drilling sites the use and consideration of data derived from a fully implemented and completed EMP under this general

permit at a prior drilling site authorized under this general permit. The permittee may propose that this data be used as a basis for modified data gathering requirements at subsequent drilling sites, if the permittee demonstrates how the use of this data from a previous drilling site(s) satisfies the goals and objectives of Sections II.A.12.a-12.b.

The Director will review the proposal and, at the Director's discretion, determine whether the original proposal or a modified proposal meets the goals and objectives at the subsequent drilling site(s). The permittee's proposal must include the following information and evaluations:

1. identification of the relevant data from a fully completed EMP under this general permit at a prior drilling site that was subject to the terms and conditions of Section II.A.12. of this general permit;

2. an evaluation demonstrating how the use of data from a previous drilling site and the proposed modified data gathering methods meet the EMP goals and objectives, Sections II.A.12.a.-12.b. at the proposed new drilling site;

3. an evaluation of physical, chemical and biological similarities and differences between the previous and proposed drilling sites and demonstrating that the proposed drilling site's marine environment (e.g., benthic community, seafloor bottom substrate, sediment characteristics, etc.) is equivalent to the previous drilling site;

4. an evaluation and demonstration that the proposed well's drilling fluid plan, including types and volumes of drilling fluid systems, chemical additives, etc., are equivalent to the actual drilling fluid plan and chemical additive inventory used at the previous drilling site; and

5. an evaluation and demonstration that the proposed well's water-based drilling fluids and drill cuttings and muds, cuttings, and cement at the seafloor (i.e., Discharges 001 and 013) volumes and drilling duration are equivalent to the actual volumes and duration at the previous drilling site.

13. End-of-Well Report. The permittee is required to submit an end-of-well report to the Director within 90 days of ceasing exploratory facility operations and all authorized discharges at a drilling site. The report must be signed and certified in accordance with the Signatory Requirements (Section VI.E.) of this general permit. The permittee must include the following information and report the following for each drilling fluid system in the end-of-well report:

a. well name, well number, general permit number, latitude, longitude, beginning drill date, and well completion date;

b. a report of discharge volumes for Discharges 001 through 013, including a discussion of any significant deviations between the final discharge volumes and the estimated discharge volumes contained in the original NOI;

c. the well drilling dates, time periods (e.g., daily duration), estimated hourly rates of discharge associated with Discharges 001 and 013;

d. if a side-track well occurred, a description of those activities;

e. the chemical additive inventories and documentation of each additive's concentration determinations and limitation compliance required for each Discharge in accordance with Section II.A.10;

f. the base drilling fluid type and the total volume added downhole;

g. the total volumes of each drilling fluid type discharged to surface waters; and

h. any diesel oil analysis/results conducted on the well or well drilling fluids and the reasons for such analyses.

14. Well Number Limitations. Except as provided below, the permittee is limited to drilling discharges from no more than five wells in a lease block. If a sidetracked well is drilled from a previously drilled well hole, the sidetracked well is considered a new well. Requests to discharge from more than five wells per lease block will be considered by the Director on a case-by-case basis. The permittee may only discharge from more than five wells in a lease block upon approval by the Director. The permittee must submit NOI(s) and related documentation, as applicable, if the permittee proposes drilling discharges from more than five wells in a lease block. The permittee must submit the following information to the Director for consideration in approval of the discharge from additional wells:

    a. number of additional wells;

    b. technical analysis of potential additional impacts to the receiving waters and marine environment; and

    c. well information for each additional well, including well name, well number, latitude, longitude, beginning drill date, the hole diameter,

estimated well depth, waste streams to be discharged, and estimated discharge volumes for each waste stream.

B. Requirements for Water-Based Drilling Fluids and Drill Cuttings (Discharge 001).

1. If authorized, the permittee may discharge water-based drilling fluids and drill cuttings subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 001 as specified in Table 1. The permittee must comply with the effluent limits in Table 1 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

2. The permittee must limit and monitor the discharge rate of water-based drilling fluids and drill cuttings as specified in Table 2 and in accordance with the restrictions specified in Paragraph B.4. of this Section.

3. The permittee must include the following components in the EMP, Section II.A.12. of this general permit, if the permittee is authorized to discharge of water-based drilling fluids and drill cuttings:

    a. Water-Based Drilling Fluids/Drill Cuttings Metals Analysis. Analysis of each drilling fluids system for the metal contaminants of concern (see Table A). The permittee may propose an alternative list based on site-specific data. Analyses for total recoverable concentrations must be conducted and reported for each metal using methods specified in 40 CFR Part 136. The results must be reported in "mg/kg of whole mud (dry weight)" and moisture content (percent by weight) of the original drilling fluid sample. Determine partition coefficients for calculating dissolved metals concentrations. Samples of water-based drilling fluids and drill cuttings must be collected when the metals concentrations are projected to be at its maximum value for each applicable system. All samples must be collected prior to any predilution.

    b. Sediment Characteristics and Discharge Effects. Conduct sediment monitoring of the drilling site for sediment characteristics (chemistry, grain size, pollutant concentrations, etc.) and statistically significant spatial and temporal accumulations and effects of Discharge 001 on sediment characteristics. Sediment characteristics must be evaluated during the following three phases of the EMP: (1) baseline site characterization; (2) post-drilling; and (3) no later than 15 months after drilling operations cease. Evaluation of the drilling discharge effects (second and third phases) must include chemical, physical and

pollutant parameter assessments of the fluids and solids deposition effects of Discharge 001. The pollutant parameter assessments must include but are not limited to the potential metal contaminants of concern in Table A.

c. Benthic Community Bioaccumulation Monitoring. Evaluate benthic community tissue for the potential metal contaminants known to be present in drilling fluids (see Table A) and organic compounds associated with Discharge 001 and conduct a metals bioaccumulation/bioavailability study in the drilling site area to assess the potential for metals contamination in the benthic community resulting from Discharge 001. The bioaccumulation study should assess effects in the benthic and epibenthic invertebrates. The EMP should target appropriate species within each group that constitute a significant portion of the diet of higher trophic level species. Any environmental factors that may ameliorate or exacerbate metals uptake, availability and persistence should be identified. Tissue evaluations and applicable components of the bioaccumulation/bioavailability study must be conducted during the following three phases of the EMP: (1) baseline site characterization; (2) post-drilling; and (3) no later than 15 months after drilling operations cease.

d. Plume and Water Column Monitoring. Sample and assess metals, organics, turbidity, and total suspended solids throughout the discharge-affected water column and discharge plume. The maximum discharge period must be targeted for this sampling event and the sampling designed to correlate with locations where modeling predicts measurable changes from ambient background conditions. To the maximum extent possible, the permittee must collect observations for potential marine mammal deflection during periods of maximum discharge.

4. Seasonal Restrictions.

a. Open-water restrictions. The permittee is prohibited from discharging at depths greater than 1 meter below the surface of the receiving water between 5 and 20 meters isobaths as measured from the MLLW during open water conditions.

b. Unstable or broken ice restrictions. The permittee is prohibited from discharging shoreward of the 20 meter isobaths as measured from the MLLW during unstable or broken ice conditions except when the

discharge is prediluted to a 9:1 ratio of seawater to drilling fluids and cuttings.

c. Stable ice restrictions. The permittee is prohibited from discharging below stable ice and must avoid, to the maximum extent possible, areas of sea ice cracking or major stress fracturing unless authorized by the Director.

5. The permittee is only authorized to discharge those drilling fluids, specialty additives, and mineral oil pills that meet the criteria of this general permit and are contained in the permittee's drilling fluid plan. If the permittee elects to use a particular drilling fluid or additive system on subsequent wells, the original drilling fluid plan may be re-used if the information identifying the drilling fluid plan is updated to reflect the current well.

6. Mineral Oil Pills.

   a. The permittee is authorized to discharge residual amounts of mineral oil pills (mineral oil plus additives) provided that the mineral oil pill and at least a 50 barrel (bbl) buffer of drilling fluid on either side of the pill are removed from the circulating drilling fluid system and not discharged to the waters of the United States. In the event that more than one pill is applied to a single well, the previous pill and buffer must be removed prior to application of a subsequent pill.

   b. Residual mineral oil concentration in the discharged drilling fluid must not exceed 2% volume of oil per volume of drilling fluid (v/v) as determined by the procedure in Appendix 7 to Subpart A of 40 CFR Part 435, American Petroleum Institute (API) Recommended Practice 13B-2. The permittee must report the following information within 60 days of the discharge if drilling fluid containing residual mineral pill oil (after pill and buffer removal) is discharged:

      1. dates of pill application, recovery, and discharge;
      2. results of the suspended particulate phase (SPP) Toxicity Test (see Table 1) on samples of:

         (a) the drilling fluid before each pill is added; and
         (b) the drilling fluid after removal of each pill and buffer (taken when residual mineral oil pill concentration is expected to be greatest).

      3. name of spotting compound and mineral oil products used;
      4. volumes of spotting compound, mineral oil, water, and barite in the pill;

5. total volume of drilling fluid circulating prior to pill application, volume of pill formulated, and volume of pill circulated;
6. volume of pill recovered, volume of drilling fluid buffer recovered, and volume of drilling fluid circulating after pill and buffer recovery;
7. percent recovery of the pill (include calculations);
8. estimated concentrations of residual spotting compound and mineral oil in the sample of drilling fluid discharged, as determined from amounts added and total drilling fluid volume circulating prior to pill application;
9. measured oil content of the drilling fluid samples, as determined by the API retort method (Appendix 7 to Subpart A of 40 CFR Part 435); and
10. an itemization of other drilling fluid components and specialty additives contained in the discharged drilling fluid with concentrations reported in gal/bbl or lbs/bbl.

Table 1. Effluent Limitations and Monitoring Requirements for Water-Based Drilling Fluids and Drill Cuttings (Discharge 001)					
Discharge	**Pollutant Parameter**	**Effluent Limitation**		**Monitoring Requirements**	
		Average Monthly Limit	**Maximum Daily Limit**	**Measurement Frequency**	**Sample Type**
Water-based fluids and cuttings	SPP toxicity [note 1,10]	Minimum 96-hour LC_{50} of 30,000 ppm		Weekly and End of Well [note 2]	Grab
	Drilling fluids and cuttings	Discharge allowed [note 3,10]		Daily	Grab
	Free oil	No discharge [note 4,10]		Daily	Grab
	Diesel oil	No discharge [note 5,10]		Daily	Grab
	Mercury	1 mg/kg [note 6]		Once per well	Grab
	Cadmium	3 mg/kg [note 6]		Once per well	Grab
	pH	Report (s.u.)		Once per well	Grab
	Total aqueous hydrocarbons (TAqH)	Report (µg/l)		Once per well [note 7]	Grab
	Total aromatic hydrocarbons (TAH)	Report (µg/l)		Once per well [note 8]	Grab
	Total Volume	See Section II.A.13. (gal)		Daily	Estimate [note 9]
Non-aqueous fluids	--	No discharge		--	--
Non-aqueous cuttings	--	No discharge		--	--

Footnotes:

1 As determined by the 96-hour SPP toxicity test in accordance with Appendix 2 to Subpart A of 40 CFR Part 435, Drilling Fluids Toxicity Test. The discharge of water-based drilling fluids or drill cuttings generated using drilling fluids with a daily minimum or monthly average minimum 96-hour LC_{50} of less than 30,000 ppm is prohibited.

2 See requirement of Section II.B.6.b. (Mineral Oil Pill). At the end-of-well, a sample must be collected for SPP toxicity testing where no mineral oil pill is used. The end-of-well sample can also serve as the monthly monitoring sample.

3 No discharge allowed upon failure of the static sheen test as determined in accordance with Appendix 1 to Subpart A of 40 CFR Part 435, Static Sheen Test.

4 As determined by the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435, Static Sheen Test.

5 The discharge of drilling fluids or drill cuttings generated using drilling fluids which contain diesel oil is prohibited. Compliance will be demonstrated by gas chromatograph (GC) analysis of drilling fluid collected from the drilling fluid used at the greatest well depth ("end-of-well" sample) and of any drilling fluids or cuttings which fail the static sheen test compared to GC analysis of diesel oil in storage at the facility. Whenever drilling fluids or drill cuttings fail the static sheen test, the permittee is required to analyze an undiluted sample of the material which failed the test to determine the presence or absence of diesel oil in accordance with EPA SW846 Method 8015C (2007). Gas chromatography/mass spectrometry (GC/MS) may be used if an instance should arise where the permittee and the Director or DEC determine that greater resolution of the drilling fluid "fingerprint" is needed for a particular drilling fluid sample.

6 Dry weight in the stock barite. Results must be expressed as mg/kg (dry weight) of barite. Analysis must be conducted by atomic absorption spectrophotometry and the results expressed as mg/kg (dry weight) of barite. The permittee must analyze a representative sample of stock barite once prior to drilling each well and submit the results with the DMR for the month in which drilling operations commence for the respective well. If any analytical result exceeds the mercury or cadmium effluent limitations in Table 1, the permittee must report the results to the Director in accordance with Section III.G., including the twenty-four hour notice of noncompliance requirement, of this general permit. If the permittee uses the same supply of stock barite to drill subsequent wells, the permittee may submit the same analysis for those subsequent wells if no new supplies of barite have been received since the prior analysis. In this case, the DMR should state that no new barite was received since the last reported analysis.

7 As determined by summing the results of EPA Method 602 (plus Xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH and EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed in EPA Method 610. Sample must be collected at the same time as the SPP toxicity test, to the extent practicable.

8 As determined by EPA Method 602 (plus Xylenes) or EPA Method 624. Sample must be collected at the same time as the SPP toxicity test, to the extent practicable.

9 Record separate total daily volumes of drilling fluids and drill cuttings and report the separate daily volumes in the End of Well Report. Report combined total volume of drilling fluids and drill cuttings discharged on a calendar day in the DMR.

10 The permittee must report the following discharge occurrences of noncompliance to the Director in accordance with Section III.Gl, including the twenty-four hour notice of noncompliance requirement, of this general permit: (a) exceedance of the SPP toxicity limitation; (b) failure of the static sheen test; or (c) presence of diesel oil.

Table 2. Discharge Rate Limitations and Monitoring Requirements for Water-Based Drilling Fluids and Drill Cuttings (Discharge 001)[note 1]			
Water Depth [note 2]	**Rate of Discharge Limitation**	**Measurement Frequency**	**Sample Type**
0 to 5 meters	No discharge	hourly during discharge [note 3]	estimate
>5 to 20 meters	500 bbl/hr		
>20 to 40 meters	750 bbl/hr		
>40 meters	1000 bbl/hr		

Footnotes:
1 Flow limitations do not apply during stable ice conditions if the discharge is to the ice surface.
2 As measured from the MLLW.
3 The maximum daily limit is the maximum hourly rate of discharge limitation. Each hourly measurement must be recorded for each calendar day of discharge within the month. The permittee should report the maximum hourly rate in a calendar day. The monthly average limit is the average of the maximum daily hourly rate for each calendar day.

C. Requirements for Deck Drainage (Discharge 002).

1. If authorized, the permittee may discharge deck drainage subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 002 as specified in Table 3. The permittee must comply with the effluent limits in Table 3 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

2. The permittee must separate area drains for washdown and rainfall that may be contaminated with oil and grease from those area drains that would not be contaminated so that the waste streams are not commingled.

3. The permittee must ensure that deck drainage contaminated with oil and grease is processed through an oil-water separator prior to discharge.

Table 3. Effluent Limitations and Monitoring Requirements for Deck Drainage (Discharge 002)					
Effluent Parameter	**Units**	**Effluent Limitations**		**Monitoring Requirements**	
		Average Monthly Limit	**Maximum Daily Limit**	**Sample Frequency**	**Sample Type**
Free oil	---	No discharge [note 1]		Once per discharge event	Grab & Visual
Total volume	Gal	Report		Monthly	Estimated
pH	s.u.	Report		Monthly	Grab
TAqH	µg/l	Report		Once per discharge event [note 2]	Grab [note 3]
TAH	µg/l	Report		Once per discharge event [note 4]	Grab [note 3]
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab [note 5]

Footnotes:

1 Once per discharge event, the permittee must sample deck drainage discharges that are processed through an oil-water separator and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435, Static Sheen Test. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used. During periods of discharge, the permittee must also conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water.

2 As determined by summing the results of EPA Method 602 (plus Xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH and EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed in EPA Method 610.

3 Sample must be collected during drilling operations.

4 As determined by EPA Method 602 (plus Xylenes) or EPA Method 624.

5 Sample must be collected from the oil-water separator effluent for WET testing.

D. Requirements for Sanitary and Domestic Wastes (Discharges 003 and 004).

1. If authorized, the permittee may discharge sanitary and domestic wastes subject to the effluent limitations and requirements herein. The permittee must comply with the appropriate effluent limits in this section at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

2. The permittee must limit and monitor Discharges 003 and 004 as specified in Tables 4 and 5.

3. For any facility using a marine sanitation device (MSD), the permittee must conduct annual testing of the MSD to ensure that the unit is operating properly. The permittee must note on the December DMR the results of the test.

4. In cases where the sanitary and domestic wastes are mixed prior to discharge, and sampling of the sanitary waste component of the discharge is infeasible, the discharge may be sampled after mixing, however, the most stringent discharge limitations for both discharges (Discharge 003 and Discharge 004) must apply to the mixed waste stream.

Table 4. Effluent Limitations and Monitoring Requirements for Sanitary Wastes (Discharge 003)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Flow	mgd	---	---	Daily	Measured/ recorded
BOD_5	mg/l	30	60	Weekly	Grab or composite note 1
TSS	mg/l	30	60	Weekly	Grab or composite note 1
Floating Solids & Garbage		no discharge		Daily	Visual note 2
Foam		no discharge		Daily	Visual note 2
Oily Sheen		no discharge		Daily	Visual note 2
pH	s.u.	6.5 – 8.5		Weekly	Grab
Fecal Coliform Bacteria	colonies/ 100 mL	100 note 3	200	Weekly	Grab
Total Residual Chlorine note 4	mg/l	---	1.0 Minimum	Weekly	Grab

Footnotes:

1 Composite samples may be collected in lieu of grab samples and must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow.

2 The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The numbers of days floating solids, garbage, foam or oily sheen are observed must be recorded and reported in the DMR.

3 Must be reported as the geometric mean.

4 Minimum of 1.0 mg/l and must be maintained as close to this concentration as possible. Sample must be collected immediately after chlorination and prior to any comingling of the waste streams. The analytical detection limit for this parameter is 0.1 mg/l. Residual chlorine may be monitored according to test procedures approved under 40 CFR Part 136 or using a Hach Test Kit capable of measuring free chlorine in the range of 0-3.5 mg/l with a sensitivity of 0.1 mg/l or better. Monitoring is not required if chlorine is not used as a disinfectant or for facilities serving fewer than 10 persons.

Table 5. Effluent Limitations and Monitoring Requirements for Domestic Wastes (Discharge 004)					
Effluent Parameter	**Units**	**Effluent Limitations**		**Monitoring Requirements**	
		Average Monthly Limit	**Maximum Daily Limit**	**Sample Frequency**	**Sample Type**
Floating solids, garbage, or foam	---	No discharge		Daily [note 1]	Visual
pH	s.u.	Report		Monthly	Grab
Flow	mgd	Report		Monthly	Estimated

Footnote:

1 Monitoring is only required when discharge occurs. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The numbers of days floating solids, garbage or foam are observed must be recorded and reported in the DMR.

E. Requirements for Desalination Unit Wastes (Discharge 005).

1. If authorized, the permittee may discharge desalination unit wastes subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 005 as specified in Table 6. The permittee must comply with the effluent limits in Table 6 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 6. Effluent Limitations and Monitoring Requirements for Desalination Unit Wastes (Discharge 005)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual/Grab
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR. If visual observations of the discharge are not possible, the permittee must sample (grab sample) the desalination unit discharge and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used.

F. Requirements for Blowout Preventer Fluid (Discharge 006).

1. If authorized, the permittee may discharge blowout preventer fluid subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 006 as specified in Table 7. The permittee must comply with the effluent limits in Table 7 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 7. Effluent Limitations and Monitoring Requirements for Blowout Preventer Fluid (Discharge 006)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual/Grab
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR. If visual observations of the discharge are not possible for discharges from surface-located blowout preventers, the permittee must sample (grab sample) the blowout preventer discharge and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used.

G. Requirements for Boiler Blowdown (Discharge 007).

1. If authorized, the permittee may discharge boiler blowdown subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 007 as specified in Table 8. The permittee must comply with the effluent limits in Table 8 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 8. Effluent Limitations and Monitoring Requirements for Boiler Blowdown (Discharge 007)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual/Grab
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR. If visual observations of the discharge are not possible, the permittee must sample (grab sample) the boiler blowdown discharge and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used.

H. Requirements for Fire Control System Test Water (Discharge 008).

1. If authorized, the permittee may discharge fire control system test water subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 008 as specified in Table 9. The permittee must comply with the effluent limits in Table 9 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 9. Effluent Limitations and Monitoring Requirements for Fire Control System Test Water (Discharge 008)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual/Grab
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR. If visual observations of the discharge are not possible, the permittee must sample (grab sample) the fire control system test discharge and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used.

I. Requirements for Non-contact Cooling Water (Discharge 009).

1. If authorized, the permittee may discharge non-contact cooling water subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 009 as specified in Table 10. The permittee must comply with the effluent limits in Table 10 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 10. Effluent Limitations and Monitoring Requirements for Non-contact Cooling Water (Discharge 009)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Daily	Visual
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Daily [note 2]	Estimated
Temperature	^{o}F	Report		Continuous [note 2]	Measure
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab

Footnote:

1 Once per day per discharge outfall, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR.

2 Estimated daily discharge volume and maximum and minimum recorded daily temperature must be reported for each outfall.

J. Requirements for Uncontaminated Ballast Water (Discharge 010).

1. If authorized, the permittee may discharge uncontaminated ballast water subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 010 as specified in Table 11. The permittee must comply with the effluent limits in Table 11 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

2. The permittee must process all ballast water contaminated with oil and grease through an oil-water separator.

Table 11. Effluent Limitations and Monitoring Requirements for Uncontaminated Ballast Water (Discharge 010)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual/Grab
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water is possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR. If visual observations of the discharge are not possible, the permittee must sample (grab sample) the ballast water discharge and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used.

K. Requirements for Bilge Water (Discharge 011).

1. If authorized, the permittee may discharge bilge water subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 011 as specified in Table 12. The permittee must comply with the effluent limits in Table 12 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

2. The permittee must process all bilge water through an oil-water separator prior to discharge.

Table 12. Effluent Limitations and Monitoring Requirements for Bilge Water (Discharge 011)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once per discharge event and Daily	Grab & Visual
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated
WET	TU_c	Report		Sections II.A.12.d.3.b.i. and II.A.12.e.	Grab

Footnote:

1 Once per discharge event, the permittee must sample bilge water discharges that are processed through an oil-water separator and test for sheen using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435. For discharges during stable, unstable or broken ice conditions, a water temperature that approximates surface water temperatures after breakup must be used. On a daily basis during discharge, the permittee must also conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR.

L. Requirements for Excess Cement Slurry (Discharge 012).

1. If authorized, the permittee may discharge excess cement slurry subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 012 as specified in Table 13. The permittee must comply with the effluent limits in Table 13 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 13. Effluent Limitations and Monitoring Requirements for Excess Cement Slurry (Discharge 012)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Once/discharge	Visual
pH	s.u.	Report		Monthly	Grab
Total Volume	gal	Report		Monthly	Estimated

Footnote:

1 Once per discharge event, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR.

M. Requirements for Muds Cuttings, and Cement at the Seafloor (Discharge 013).

1. If authorized, the permittee may discharge muds, cuttings and cement at the seafloor subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 013 as specified in Table 14. The permittee must comply with the effluent limits in Table 14 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this general permit.

Table 14. Effluent Limitations and Monitoring Requirements for Muds, Cuttings, and Cement at the Seafloor (Discharge 013)

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Free Oil	---	No discharge [Note 1]		Daily	Visual
Total Volume	gal	Report		Monthly	Estimated

Footnote:

1 Daily during discharge, the permittee must conduct a visual observation for visual sheen as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The number of days sheen is observed must be recorded and reported in the DMR.

N. Cooling Water Intake Structure Requirements

1. Applicability. These requirements apply to new offshore oil and gas extraction facilities for which construction was commenced after July 17, 2006, that meet the following criteria: (1) it is a point source that uses or proposes to use a cooling water intake structure; (2) it has at least one cooling water intake structure that uses at least 25 percent of the water it withdraws for cooling purposes as specified in subsection N.2. below; and (3) it has a design intake flow greater than 2 million gallons of water per day.

2. Threshold Design Intake Flow Capacity. The threshold requirement that at least 25 percent of water withdrawn be used for cooling purposes must be measured on an average monthly basis. A new facility meets the 25 percent cooling water threshold if, based on the new facility's design, any monthly average over a year for the percentage of cooling water withdrawn is expected to equal or exceed 25 percent of the total water withdrawn.

3. Best Management Practices for All Facilities. New facilities that do not meet the threshold requirements regarding the amount of water withdrawn or percentage of water withdrawn for cooling water purposes in subsection N.1. above, and existing facilities, are required to implement best management practices to minimize the impingement mortality and entrainment of all life stages of fish and shellfish in accordance with the Best Management Practices Plan requirements, Section IV.B.5. New facilities that meet the threshold requirements are also are required to implement the Best Management Practices Plan requirements, Section IV.B.5., in addition to the other Cooling Water Intake Structure Requirements in Attachment 2 of this general permit.

4. Attachment 2, Cooling Water Intake Structure Requirements for New Facilities. The applicant/permittee of a new facility meeting the applicability provisions of subsection N.1. above must comply with the provisions of Attachment 2 of this general permit. Attachment 2 is an integral and enforceable part of this general permit.

5. More Stringent Requirements. The applicant/permittee must comply with any more stringent requirements relating to location, design, construction, and capacity of a cooling water intake structure(s) or monitoring requirements at a new offshore oil and gas extraction facility that the Director deems are reasonably necessary to comply with any provision of federal or state law, including compliance with applicable state water quality standards (including designated uses, criteria, and antidegradation requirements).

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges).

1. The permittee must ensure that samples and measurements taken for the purpose of monitoring are representative of the monitored activity.

2. In order to ensure that the effluent limits set forth in this general permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Section II of this general permit.

3. The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with Section III.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with Section III.D ("Additional Monitoring by Permittee").

B. Reporting of Monitoring Results.

The permittee must summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1, or equivalent). The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part VI.E. of this general permit ("Signatory Requirements"). The permittee must submit monitoring data and other reports electronically using NetDMR.

DMRs must be submitted to EPA no later than the 10th of the month following the completed reporting period. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit paper copies of DMRs. Inquiries regarding the NetDMR process may be made to EPA at the following address:

Office of Compliance and Enforcement
U. S. Environmental Protection Agency, Region 10
ATTN: ICIS Data Entry Team
1200 Sixth Avenue, Suite 900, **OCE-133**
Seattle, Washington 98101
NPDES Compliance Hotline: (206) 553-1846

NetDMR is accessed from http://www.epa.gov/netdmr.

C. Monitoring Procedures. The permittee must conduct monitoring according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this general permit.

D. Additional Monitoring by Permittee.

1. If the permittee monitors any pollutant more frequently than required by this general permit, using test procedures approved under 40 CFR Part 136 or as specified in this general permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

2. Upon request by the Director, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents. The permittee must ensure that records of monitoring information include:

1. the date, exact place, and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records. The permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this general permit, copies of DMRs; a copy of this NPDES permit, and records of all data used to complete the application for this general permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

G. Noncompliance Reporting

1. Twenty-four Hour Notice of Noncompliance Reporting.

a. The permittee must report to the Director any unauthorized discharges by telephone within 24 hours from the time the permittee becomes aware of the discharge.

b. The permittee must report to the Director the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the following circumstances:

1. any noncompliance that may endanger human health or the environment;

2. any unanticipated bypass that exceeds any effluent limitation in the general permit (See Section V.F, "Bypass of Treatment Facilities");
3. any upset that exceeds any effluent limitation in the general permit (See Section V.G, "Upset Conditions"); or
4. any violation of a maximum daily discharge limitation for any of the pollutants in Section II of the general permit requiring 24-hour reporting.

c. The permittee must also provide a written submission to the Director within five days of the time that the permittee becomes aware of any event required to be reported under Sections III.G.1.a. and III.G.1.b. For events required to be reported under Section III.G.1, the written submission must contain:

1. a description of the noncompliance and its cause;
2. the period of noncompliance, including exact dates and times;
3. the estimated time noncompliance is expected to continue if it has not been corrected; and
4. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

d. The Director of the Office of Compliance and Enforcement may waive the written report required for Section III.G.1.c. on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.

e. The permittee must submit reports to the addresses in Section III.B ("Reporting of Monitoring Results").

2. **Other Noncompliance Reporting.** The permittee must report all instances of noncompliance not required to be reported within 24 hours, at the time that monitoring reports for Section III.B. ("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Section III.G.1. ("Twenty-four Hour Notice of Noncompliance Reporting") of this general permit.

H. Changes in Discharge of Toxic Substances. The permittee must notify the Director as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the general permit, if that discharge will exceed the highest of the following "notification levels":

a. One hundred micrograms per liter (100 µg/l);

b. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or

d. The level established by the Director in accordance with 40 CFR § 122.44(f).

2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the general permit, if that discharge may reasonably be expected to exceed the highest of the following "notification level":

a. Five hundred micrograms per liter (500 µg/l);

b. One milligram per liter (1 mg/l); for antimony;

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or

d. The level established by EPA in accordance with 40 CFR § 122.44(f).

3. The permittee must submit the notification to the Office of Water and Watersheds at the following address:

U.S. EPA Region 10
Attn: NPDES Permits Unit Manager
1200 Sixth Avenue
Suite 900, OWW-130
Seattle, Washington 98101-3140

I. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this general permit must be submitted no later than 14 days following each schedule date.

IV. SPECIAL CONDITIONS

A. Quality Assurance Project Plan Requirements.

1. The permittee must develop, implement, and submit a QAPP for all monitoring required by this general permit. The permittee must complete and initiate implementation of the QAPP prior to the pre-drilling monitoring required in the Environmental Monitoring Program in Section II.A.12. Within 90 days following written notification that the Director has authorized discharge under this general permit, the permittee must notify the Director, in writing, that the QAPP is complete and the date it was implemented. This notification must be signed in accordance with the Signatory Requirements (Section VI.E.) of this general permit.

2. The QAPP must address the monitoring activities required by this general permit. The QAPP must be designed to assist in planning for the collection and analysis of data required in the Environmental Monitoring Program (Section II.A.12.), effluent and receiving water samples and measurements in support of the general permit and in explaining data anomalies when they occur.

3. The permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAPP must be prepared in the format which is specified in these documents. At a minimum, the following information must be included in the QAPP:

   a. Sample locations (map and physical description, which includes station identification number, latitude, and longitude);

   b. Sample frequency;

c. Sample handling, storage, transport, and Chain-of-Custody procedures;

d. Parameters, preparation and analysis methods, detection limits, and volume of sample required for each analyte in each medium (i.e., water or sediment);

e. Number of QC samples, spikes and replicates required for analysis (for precision accuracy);

f. Documentation requirements for the laboratory (i.e., retention or holding time, QA/QC procedures for test methods, volume of sample collected, field test blanks, etc.);

g. Organizational responsibilities - who is responsible for QA/QC activities (i.e., who takes samples, who reviews the data analysis, etc.); and

h. Name(s), address(es), and phone number(s) of laboratories used or proposed to be used by the permittee.

4. The permittee is responsible for reviewing and updating the QAPP to ensure all material is current and applicable.

5. The permittee must amend the QAPP whenever there is a modification in the sample collection, sample analysis, or other procedures addressed by the QAP or a change in the guidance cited above.

6. The permittee must keep copies of the most current QAPP on site at the exploratory facility and must make the QAPP available to the Director upon request.

B. Best Management Practices Plan Requirements.

1. The permittee must develop and implement a BMP Plan which achieves the objectives and specific requirements listed below. The permittee must operate the exploratory facility in accordance with its current BMP Plan or in accordance with subsequent amendments to the BMP Plan. The permittee must ensure that the BMP Plan incorporates practices to achieve the objectives and specific requirements listed below.

2. The permittee must certify and notify the Director in writing that the BMP Plan is complete and on-site at least 7 days prior to any authorized discharge under this general permit. The certification must identify the NPDES permit number and be signed in accordance with the Signatory Requirements of Section VI.E.

3. Through implementation of the BMP Plan, the permittee must:

   a. Prevent or minimize the generation and the potential for the release of pollutants from the exploratory facility to the waters of the United States through normal operations and ancillary activities; and

   b. Ensure that methods of pollution prevention, control, and treatment will be applied to all wastes and other substances discharged.

4. The permittee must develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.

   a. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the exploratory facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.

   b. Under the BMP Plan, and any Standard Operating Procedures included in the BMP Plan, the permittee must ensure proper operation and maintenance of the exploratory facility.

   c. The permittee must establish specific objectives for the control of pollutants by conducting the following evaluations.

      1. Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, and natural phenomena such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including loading or unloading operations or spillage or leaks.

      2. Where experience indicates a reasonable potential for equipment failure, natural condition (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the program should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

5. The BMP Plan must be consistent with the objectives listed above and the general guidance contained in the publication entitled *Guidance Manual for Developing Best Management Practices (BMPs)* (USEPA, EPA 833-B-93-

004, 1993) or any subsequent revisions to the guidance document. The BMP Plan must:

a. Be written in narrative form and must include any necessary plot plans, drawings or maps, and must be developed in accordance with good engineering practices. The BMP Plan must be organized and written with the following structure:

    1. Name and location of the facility.
    2. Statement of BMP policy.
    3. Structure, functions, and procedures of the BMP Committee, which is responsible for developing, implementing and maintaining the BMP Plan.
    4. Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to, the following:

        (a) modification of equipment, facilities, technology, processes, and procedures,
        (b) reformulation or redesign of products,
        (c) substitution of materials, and
        (d) improvement in management, inventory control, materials handling or general operational phases of the facility.

    5. Risk identification and assessment.
    6. Reporting of BMP incidents. The written reports must include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices and procedures to prevent recurrence.
    7. Materials compatibility.
    8. Good housekeeping.
    9. Preventative maintenance.
    10. Inspections and records.
    11. Security.
    12. Employee training.

b. Include the following provisions concerning BMP Plan review:

    1. Annual review by exploratory facility engineering staff and the exploratory facility manager.

2. Annual review and endorsement by the permittee's BMP Committee.
3. Include a statement that the above annual reviews have been completed and that the BMP Plan fulfills the requirements set forth in this general permit. The statement must include the dated signatures of each BMP Committee member as certification of the annual reviews.
4. The permittee must submit a copy of the annual certification statement to the Director with the December DMR.

c. Establish specific best management practices to meet the objectives identified above, addressing each component or system capable of generating or causing a release of significant amounts of pollutants, and identifying specific preventative or remedial measures to be implemented.

d. Establish specific best management practices or other measures which ensure that the following specific requirements are met:

1. Ensure proper management of solid and hazardous waste in accordance with the regulations promulgated under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP Plan.
2. Reflect requirements for oil spill response plans under 30 CFR Part 254 and 33 CFR Part 154 and may incorporate any part of such plans into the BMP Plan by reference.
3. Reflect requirements for storm water control under Section 402(p) of the Act and the regulations at 40 CFR 122.26 and 122.44, and otherwise eliminate to the extent practicable, contamination of storm water runoff.
4. Reflect requirements for air emissions under applicable state and federal air quality regulations and permits.
5. Address on-ice disposal methods, including on-ice spacing of discharge piles and height of accumulated drilling fluids and cuttings piles.
6. Indentify chemical additive inventory procedures (i.e., implementation procedures, calculation methods, record-keeping and reporting procedures) to ensure compliance with the Section II.A.10. of this general permit.
7. Select and implement cooling water intake structure design and construction technologies or operational measures for minimizing impingement mortality and entrainment of fish and shellfish.

e. Include the following minimum set of BMPs:

1. Ensure that solids, sludges, or other pollutants removed in the course of treatment or control of water and wastewaters are disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.
2. Separate used motor oil from deck drainage collection systems.
3. Minimize wastewater treatment system upsets by the controlled usage of deck washdown detergents.
4. Reduce oil spillage and oil leaks from pump bearings and seals through the use of good prevention techniques such as drip pans and other handling and collection methods.
5. If oil is used as a spotting fluid, careful attention to the operation of the drilling fluid system could result in the segregation from the main drilling fluid system of the spotting fluid and contaminated drilling fluid. Once segregated, the contaminated drilling fluid can be disposed of in an environmentally acceptable manner.
6. When possible, substitute standard drill pipe threading compound (pipe dope) with "toxic metals free" pipe dope.
7. Careful application of standard drill pipe dope to minimize contamination of receiving water and drilling fluids.
8. Substitute diesel oil with less toxic mineral oil or synthetic-based material in drilling fluid applications.
9. When possible, substitute standard drilling fluid additives with less toxic additives.
10. Careful handling of drilling fluid materials and treatment chemicals to prevent spills.
11. Use of local containment devices such as liners, dikes and drip pans where chemicals are being unpackaged and where wastes are being stored and transferred.
12. Install treatment devices for deck drainage to reduce or remove pollutants in the discharges (e.g., skim tanks, oil/water separators, sediment tanks/basins, or detention ponds).

6. The permittee must maintain a copy of the BMP Plan at the exploratory facility and must make the BMP plan available to the Director upon request.

7. The permittee must amend the BMP Plan whenever there is a change in the exploratory facility or in the operation of the exploratory facility that materially increases the generation of pollutants or their release or potential release to the receiving waters. The permittee must also amend the BMP

Plan, as appropriate, when facility operations covered by the BMP Plan change. Any such changes to the BMP Plan must be consistent with the objectives and specific requirement listed above. Any changes to the BMP Plan must be reported to the Director in writing.

8. All changes in the BMP Plan must be reviewed by the exploratory facility engineering staff, exploratory facility manager and the BMP Committee. The amended BMP Plan must include a certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this general permit. The certified statement must include the dated signatures of each BMP Committee member as certification of the reviews of the amended BMP Plan. All changes in the BMP Plan must be reported to the Director in writing with the annual certification required under Paragraph B.5.b. above. The permittee must submit a copy of the certified statement and a report of all changes in the BMP Plan to the Director and DEC with the December DMR.

C. Drilling Fluid Plan Requirements.

1. The permittee must develop and implement a written procedural plan for the formulation and control of drilling fluid/chemical additive systems for each well. The drilling fluid plan must specify the drilling fluid/chemical additive systems to be used. The plan must be implemented during drilling operations and a copy of the plan must be available on-site at the exploratory facility at all times.

2. The permittee must submit a copy of the completed drilling fluid plan to the Director with the NOI.

3. At a minimum, the drilling fluid plan must include the following information:

   a. Types of drilling fluids proposed for discharge, the well name, well number, location, and drilling fluid types as basic plan identification for each well drilled.

   b. Specific for use at each well and drilling fluid type, a list including commercial product names, descriptions of the products, and the maximum proposed discharge concentrations for each product and chemical additive. Concentrations must be commonly stated in appropriate terms (e.g., lb/bbl, gal/bbl, % (wt), or % v/v (% volume oil per volume drilling fluid). Each drilling fluid or additive system must be clearly labeled with respect to drilling fluid type (e.g., KCl/polymer drilling fluid, freshwater lignosulfonate drilling fluid). Components of the

basic drilling fluid must be listed separately from specialty or contingency chemical additives which may be used.

c. A record of the operator's determination of how discharge of drilling fluids and drill cuttings is expected to comply with the 30,000 ppm SPP toxicity limitation. Operator's determination must be based upon, but not limited to, the following criteria:

    1. Estimate of worst-case cumulative discharge toxicity based on additive toxicity estimations or commercially calculated discharge toxicity estimations;
    2. Estimations of discharge toxicity based on the use of mineral oil pills and subsequent discharge of residual mineral oil concentrations must be estimated separately from the proposed drilling fluid or additive system; and
    3. Description of how overall toxicity is minimized, where possible.

d. A clearly stated procedure for determining whether or not a chemical additive not originally planned for or included in toxicity estimations may be used and discharged.

e. An outline of the drilling fluid planning process which must be consistent with other general permit requirements. Names and titles of personnel responsible for the drilling fluid planning process must be included in the drilling fluid plan.

D. 40 CFR Part 125.123(c)(4) Requirements.

In addition to any other grounds specified herein, coverage under this general permit shall be modified or revoked at any time if, on the basis of any new data, the Director determines that continued discharges may cause unreasonable degradation of the marine environment.

V. COMPLIANCE RESPONSIBILITIES

A. **Duty to Comply.** The permittee must comply with all conditions of this general permit. Any general permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for general permit termination, revocation and reissuance, or modification; or for denial of a general permit renewal application. The permittee must give written notice to the Director of any planned changes in the permitted exploratory facility or facility's activities which may result in noncompliance with general permit requirements.

B. **Penalties for Violations of Permit Conditions.**

1. **Civil Penalties.** Pursuant to 40 CFR 19 and the Act, any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any such Sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Sections 402(a)(3) or 402(b)(8) of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) [currently $37,500 per day for each violation].

2. **Administrative Penalties.** Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such Sections in a permit issued under Section 402 of the Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) [currently $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500]. Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) [currently $16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500].

3. **Criminal Penalties**.

a. **Negligent Violations.** The Act provides that any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such Sections in a permit issued under Section 402 of the Act, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person must be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both.

b. **Knowing Violations.** Any person who knowingly violates such sections, or such permit conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person must be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. **Knowing Endangerment.** Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such Sections in a permit issued under Section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, must, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person must be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3(B)(iii) of the Act, must, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for a second or subsequent convictions.

d. **False Statements.** The 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 must, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. The

Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this general permit, including monitoring reports or reports of compliance or non-compliance must, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

C. **Need to Halt or Reduce Activity not a Defense.** It must not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this general permit.

D. **Duty to Mitigate.** The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this general permit that has a reasonable likelihood of adversely affecting human health or the environment.

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

F. **Bypass of Treatment Facilities.**

1. **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 paragraphs F.2. and F.3. of this Section.

2. **Notice**.

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice, if possible at least 10 days before the date of the bypass.

   b. Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under Section III.G. (“Noncompliance Reporting”).

3. **Prohibition of bypass**.

a. Bypass is prohibited, and the Director of the Office of Compliance and Enforcement may take enforcement action against the permittee for a bypass, unless:

1. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
2. 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 judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
3. The permittee submitted notices as required under paragraph F.2. of this Section.

b. The Director of the Office of Compliance and Enforcement may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph F.3.a. of this Section.

G. **Upset Conditions.**

1. **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 permittee meets the requirements of paragraph G.2. of this Section. 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.

2. **Conditions necessary for a demonstration of upset.** To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

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

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required under Section III.G. ("Noncompliance Reporting"); and

d. The permittee complied with any remedial measures required under Section V.D. ("Duty to Mitigate").

3. **Burden of proof.** In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. **Toxic Pollutants.** The permittee must 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 establish those standards or prohibitions, even if the general permit has not yet been modified to incorporate the requirement.

I. **Planned Changes.** The permittee must give notice to the Director of the Office of Compliance and Enforcement at the address in Section III.B. as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR § 122.29(b); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the general permit, nor to notification requirements under Section III.H. ("Changes in Discharge of Toxic Substances").

J. **Anticipated Noncompliance.** The permittee must give advance notice to the Director of the Office of Compliance and Enforcement of any planned changes in the permitted facility or activity that may result in noncompliance with this general permit.

K. **Transfers.** This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the general permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR § 122.61; in some cases, modification or revocation and reissuance is mandatory). Notice to the Director should be sent to the address in Section I.F.1. of this general permit.

VI. GENERAL PROVISIONS

A. **Permit Actions.** This general permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§ 122.62, 122.64, or 124.5. The filing of a request by the permittee for a general permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any general permit condition.

B. **Duty to Reapply.**

1. If the permittee intends to continue an activity regulated by this general permit after the expiration date of this general permit, the permittee must either apply for and obtain an individual permit or submit an NOI to be covered under a new general permit. In accordance with 40 CFR § 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Director, the permittee must submit an application for an individual permit or submit a new NOI at least 180 days before the expiration date of this general permit.

2. If this general permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with section 558(c) of the Administrative Procedure Act (5 U.S.C. 558(c)) and EPA's implementing regulations at 40 CFR 122.6 and remain in force and effect for discharges that were authorized prior to general permit expiration. Permittees granted general permit coverage prior to the expiration date will automatically remain covered by this general permit until the earliest of:

   a. authorization for coverage under a reissuance or replacement of this general permit, following timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new general permit and compliance with the requirements of the new general permit; or

   b. submittal of a Notice of Termination; or

   c. issuance of a new general permit that authorizes exploration facility discharges and provides general permit coverage without requiring re-submittal of a Notice of Intent to obtain coverage; or

   d. issuance or denial of an individual permit for the facility's discharges; or

   e. a formal permit decision by EPA not to reissue this general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

C. **Duty to Provide Information.** The permittee must furnish to the Director, within any reasonable time specified in the request, any information that the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this general permit, or to determine compliance with this general permit. The permittee must also furnish to the Director, upon request, copies of records required to be kept by this general permit.

D. **Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or in any report to the Director, it must promptly submit such facts or information.

E. **Signatory Requirements.** All applications, reports or information submitted to the Director must be signed and certified as follows:

1. All permit applications must be signed as follows:

   a. For a corporation: by a responsible corporate officer.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

   c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the general permit and other information requested by the Director must 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:

   a. The authorization is made in writing by a person described above;

   b. 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, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and

   c. The written authorization is submitted to the Director of the Office of Compliance and Enforcement.

3. **Changes to authorization.** If an authorization under Section VI.E.2. 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 Section VI.E.2. must be submitted to the Director of the Office of Compliance and Enforcement prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. **Certification.** Any person signing a document under this Section must 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."

F. **Availability of Reports.** In accordance with 40 CFR Part 2, information submitted to the Director pursuant to this general permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Director may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2, Subpart B (Public Information) and 41 Fed. Reg. 36924 (September 1, 1976), as amended.

G. **Inspection and Entry.** The permittee must allow the Director of the Office of Compliance and Enforcement or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. 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 general permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this general permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this general permit; and

4. 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.

H. **Property Rights.** The issuance of this general permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of state or local laws or regulations.

I. **State Laws.** Nothing in this general permit must 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 Act.

J. **Oil and Hazardous Substance Liability.** Nothing in this general permit must 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 or the Act or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

K. **Severability.** The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of any such provision to the circumstances, and the remainder of this general permit must not be affected thereby.

VII. DEFINITIONS

Act means the Clean Water Act.

Administrator means the Administrator of the EPA, or an authorized representative.

API means American Petroleum Institute.

Average Monthly Limit 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 "daily discharges" measured during that month.

Ballast water means harbor or seawater added or removed to maintain the proper ballast floater level and ship draft and to conduct jack-up rig related sea bed support capability tests (e.g. jack-up rig preload water).

bbl means barrel.

Best Management Practices (BMPs) means schedules of activities, prohibitions or practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

Bilge water means water which collects in the lower internal parts of the drilling vessel hull.

Biocide means any chemical agent used for controlling the growth of or destroying nuisance organisms (e.g., bacteria, algae, and fungi).

Blowout preventer fluid means fluid used to actuate hydraulic equipment on the blowout preventer.

BOD means biochemical oxygen demand. This is a measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days, designated BOD_5), in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

Boiler blowdown means the discharge of water and minerals drained from boiler drums to minimize solids build-up in the boiler.

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

Cessation or *to cease* means to completely stop or discontinue an activity.

CFR means Code of Federal Regulations.

Chronic toxic unit (TU_c) is a measure of chronic toxicity.

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 units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the 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 day.

DEC means the Alaska Department of Environmental Conservation.

Deck drainage means any waste resulting from platform washings, deck washings, spillage, rainwater, and runoff from curbs, gutters, and drains including drip pans and work areas within facilities subject to this general permit.

Desalination unit wastes means wastewater associated with the process of creating fresh water from seawater.

Diesel oil means the grade of distillate fuel, as specified in the American Society for Testing and Materials (ASTM) Standard Specifications for Diesel Fuel Oils 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 this general permit, "diesel oil" includes the fuel oil present at the facility.

Director means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.

DMR means discharge monitoring report.

Domestic waste means materials discharged from sinks, showers, laundries, safety showers, eye-wash stations, hand-wash stations, fish cleaning stations, and galleys.

Drill cuttings means particles generated by drilling into subsurface geological formations and carried out from the wellbore with the drilling fluid. Examples of drill cuttings include small pieces of rock varying in size and texture from fine silt to gravel. Drill cuttings are generally generated from solids control equipment and settle out and accumulate in quiescent areas in the solids control equipment or other equipment processing drilling fluid.

Drilling activities (see definition for "exploratory facility").

Drilling fluid means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. The classes of drilling fluids are water-based fluid and non-aqueous drilling fluid.

Drilling site means the single, specific geographical location where an exploratory facility (e.g., jack-up rig, drill ship, semi-submersible, or arctic mobile rig) is positioned (e.g., anchored, secured bottomfast, built on a gravel island or ice pad, etc.) and conducts its well drilling activity, including the seafloor area impacted by the drilling activity.

EMP means Environmental Monitoring Program.

End of Well means, for the purposes of the End of Well Report, after the exploratory facility has ceased all operations and all authorized discharges at a drilling site and the exploratory facility has been removed from the drilling site.

End of Well means, for purposes of sampling drilling fluids and drill cuttings, at the location where the drill bit is at least 80% of the final well footage (i.e., final well bottom location).

Enhanced mineral oil, for the purposes of this general permit, means a petroleum distillate which has been highly purified and is distinguished from diesel oil and conventional mineral oil in having a lower polycyclic aromatic hydrocarbon (PAH) content. Typically, conventional mineral oils have a PAH content on the order of 0.35 weight percent expressed as phenanthrene, whereas enhanced mineral oils typically have a PAH content of 0.001 or lower weight percent PAH expressed as phenenthrene.

Enhanced mineral oil-based drilling fluid means "drilling fluid" that has an enhanced mineral oil as its continuous phase with water as the dispersed phase.

EPA means the United States Environmental Protection Agency.

Excess cement slurry means the excess cement and wastes from equipment washdown after a cementing operation. Excess cement slurry is discharged intermittently while drilling, depending on drilling, casing, and testing program and problems.

Exploratory facility, for the purposes of this general permit, means any fixed or mobile structure with the capacity to drill exploration wells to determine the nature of potential hydrocarbon reservoirs and/or drill underground injection control wells.

°F means degree Fahrenheit.

FC means fecal coliform.

Filter Backwash means wastewater generated when filters are cleaned and maintained.

Fire control system test water means the water released during the training of personnel in fire protection and the testing and maintenance of fire protection equipment.

Fixed Facility means a bottom founded offshore oil and gas extraction facility permanently attached to the seabed or subsoil of the outer continental shelf. This definition does not include mobile offshore drilling units (e.g., drillships, temporarily moored semi-submersibles, jack-ups, submersibles, tender-assisted rigs, and drill barges).

gal means gallon.

Garbage means all kinds of victual, domestic, and operational waste, excluding fresh fish and part thereof, generated during the normal operation 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.

GC/MS means Gas Chromatography/Mass Spectrometry.

Grab sample is an individual sample collected over a period of time not exceeding 15 minutes.

hr means hour.

Hydrotest water is filtered sea water, or occasionally fresh water, used to test the integrity of unused produced water lines, or produced water lines which are suspected of leaking or which have recently been repaired.

IC_{25} means 25 percent inhibition concentration, which is a point estimate of the toxicant concentration, expressed in percent effluent, that causes a 25% reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model.

Initiation of discharges means commencing any of the authorized discharges under the general permit.

lb means pound.

Marine sanitation device (MSD) means a sanitary wastewater treatment system specifically designed to meet U.S. Coast Guard requirements.

Maximum daily limit means the highest allowable "daily discharge."

mg/kg means milligrams per kilogram; this is equivalent to parts per million, or 10^{-6}.

mg/l means milligrams per liter, in water; this is equivalent to mg/kg.

mgd means million gallons per day.

Mineral oil means a class of low volatility petroleum product, generally of lower aromatic hydrocarbon content and lower toxicity than diesel oil.

Mineral oil pills (also called mineral oil spots) are formulated and circulated in the drilling fluid system as a slug in attempt to free stuck pipe. Pills generally consist of two parts; a spotting compound and mineral oil.

MLLW means Mean Lower Low Water.

Muds, cuttings, cement at sea floor means the materials discharged at the surface of the ocean floor during construction of the mudline cellar, during the early phases of drilling operations before the riser is installed, and during well abandonment and plugging.

New Source, for the purposes of this general permit and 40 CFR Part 435, means any facility or activity that is in the process of surveying, clearing or preparing an area of the water body floor for the purpose of constructing or placing a development or production facility on or over the site.

NOEC means no observed effect concentration. The NOEC is the highest concentration of toxicant, expressed in percent effluent, to which organisms are exposed in a chronic toxicity test that causes no observable effects on the test organisms.

NOI means Notice of Intent.

Non-aqueous drilling fluid (NAF) or *non-aqueous fluids* means "drilling fluid" that has water-immiscible fluid as its continuous phase and the suspending medium for solids, such as oleaginous materials (e.g., mineral oil, enhanced mineral oil, paraffinic oil, C_{16}-C_{18} internal olefins, and C_8-C_{16} fatty acid/2-ethylhexyl esters). Types of non-aqueous drilling fluids include oil-based fluid, enhanced mineral oil-based fluid, and synthetic-based fluid.

Non-contact cooling water means water used for contact, once-through cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content.

Non-Fixed Facility means mobile offshore drilling units, such as drill ships, temporarily moored semi-submersibles, jack-ups, submersibles, tender-assisted rigs, and drill barges.

NPDES means National Pollutant Discharge Elimination System.

OCS means the Outer Continental Shelf.

Oil-based drilling fluid means "drilling fluid" that has diesel oil, mineral oil, or some other oil, but neither a synthetic material nor enhanced mineral oil, as its continuous phase with water as the dispersed phase.

Operations cessation means when all exploratory facility operations have ceased, including ceasing of all authorized discharges at a drilling site. Facility operations cessation will typically coincide with the exploratory facility's demobilization from the drilling site.

Plastic means any garbage that is solid material, that contains as an essential ingredient one or more synthetic organic high polymers, and that is formed or shaped either during the manufacture of the polymer or polymers or during fabrication into a finished product by heat or pressure or both. "Degradable" plastics, which are composed of combinations of degradable starches and are either synthetically produced or naturally produced but harvested and adapted for use, are plastics for the purposes of this general permit. Naturally produced plastics such as crabshells and other types of shells, which appear normally in the marine environment, are not plastics for the purposes of this general permit.

ppm means parts per million.

QA/QC means quality assurance/quality control.

QAPP means Quality Assurance Project Plan.

RCRA means Resource Conservation and Recovery Act.

RWC means Receiving Water Concentration.

Sanitary wastes means human body waste discharged from toilets and urinals.

Seachest means the underwater compartment or cavity within the facility or vessel hull or pontoon through which seawater is drawn in (for cooling and other purposes) or discharged.

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 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.

Sidetrack means drilling a secondary wellbore from the original wellbore, usually due to broken drill pipe or casing that has become lodged permanently in the hole.

Solids control equipment means shale shakers, centrifuges, mud cleaners, and other equipment used to separate drill cuttings and/or stock barite solids from drilling fluid recovered from the wellbore.

SPP means suspended particulate phase.

Stable ice means ice that is stable enough to support discharged drilling fluids and drill cuttings.

Static sheen test means the standard test procedures in Appendix 1 to subpart A of 40 CFR part 435 that have been developed for this industrial subcategory for the purpose of demonstrating compliance with the requirement of no discharge of free oil.

Stock barite means the barite that was used to formulate a drilling fluid.

Stock base fluid means the base fluid that was used to formulate a drilling fluid.

s.u. means standard unit, as for the parameter pH.

Synthetic-based drilling fluid means "drilling fluid" that has a synthetic material or a combination of synthetic materials as its continuous phase with water as the dispersed phase.

Synthetic material as applied to synthetic-based drilling fluid means material produced by the reaction of specific purified chemical feedstock, as opposed to the traditional base fluids such as diesel and mineral oil which are derived from crude oil solely through physical separation processes.

TAH means total aromatic hydrocarbons.

TAqH means total aqueous hydrocarbons.

µg/l means micrograms per liter.

Unstable or broken ice conditions means greater than 25 percent ice coverage within a one (1) mile radius of the discharge site after spring breakup or after the start of ice formation in the fall, but not stable ice.

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.

Victual waste means any spoiled or unspoiled food waste.

v/v means percent volume of oil per volume of drilling fluid.

Water-based drilling fluid means "drilling fluid" that has water as its continuous phase and the suspending medium for solids, whether or not oil is present.

Water depth means the depth of the water between the surface and the seafloor as measured at MLLW.

WET means Whole Effluent Toxicity.

wt means weight.

96-hour LC_{50} means the concentration (parts per million) or percent of the SPP from a sample that is lethal to 50 percent of the test organisms exposed to that concentration of the SPP after 96 hours of constant exposure. In a similar manner, 24-hour LC_{50} or 48-hour LC_{50} means the concentration lethal to 50 percent of test organisms after 24 or 48 hours, respectively, of constant exposure.