



United States Environmental Protection Agency  
Region 10  
1200 Sixth Avenue  
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 AND CONTIGUOUS STATE WATERS

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:

<u>Discharge Number</u>	<u>Discharge Description</u>
001	Drilling Fluids and Drilling 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	Mud, Cuttings, Cement at Seafloor
014	Test Fluids

are authorized from **oil and gas exploratory facilities** to offshore areas Alaska located in or adjacent to the Beaufort Sea, Chukchi Sea, Hope, and Norton planning basins as defined in this 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 permit applies only to those facilities that have been authorized in accordance with the procedures described in Part I of this permit.

This permit shall become effective on **June 26, 2006**.

This permit and the authorization to discharge shall expire at midnight, **June 26, 2011**.

Signed this 16th day of May, 2006,

\_\_\_\_\_/s/\_\_\_\_\_  
Michael F. Gearheard  
Director  
Office of Water and Watersheds, Region 10  
U.S. Environmental Protection Agency

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## 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 435 Subpart A). This general permit does not authorize discharges from “new sources” as defined in Part VII of this general permit.
- B. **Area of Coverage.** This general permit covers the area of federal and State waters of the U.S. in the Beaufort Sea, Chukchi Sea, Hope Basin, and Northern Norton Basin located seaward from the shoreline (MLLW) at the 64.5° N latitude (Cape Rodney) to the U.S. and Russia border and extending northward to the Alaska, USA and Yukon, Canada border as shown in Figure 1.
- C. **Prohibited Areas of Discharge.** [reserved]
- D. **Authorization to Discharge.**
1. Applicants seeking coverage under this general permit shall submit to the Director and the Alaska Department of Environmental Conservation (ADEC), at the addresses provided in Section I.G (Submission of Information), a written notice of intent (NOI) to be covered by this general permit. The permittee must clearly identify in the NOI the discharges for which they are applying under this general permit. Applicants may request a zone of deposit (ZOD) from ADEC by completing the ZOD section of the NOI. Applicants may request a mixing zone for sanitary and domestic wastes from ADEC. Applicants requesting a mixing zone must demonstrate that other disposal means are not economically feasible.
  2. Applicants must submit a complete NOI to the Director at least 45 days prior to initiation of discharges. A complete NOI will contain the information provided in Attachment 1 of this general permit. The applicant may use the NOI information sheet in Attachment 1 as part of their NOI submittal. The NOI shall be signed in accordance with the Signatory Requirements of Section VI.E of this general permit.
  3. Applicants will be authorized to discharge as of the date of written notification that the Director has authorized the discharge and assigned a permit number under this general permit. [note: EPA will normally authorize a discharge only after receiving 401 cert from ADEC, which would include the State’s mixing zone determination.] The authorized

permittee will be allowed to discharge during the effective period of this general permit within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

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 shall apply to the source upon revocation of the individual permit.
5. Mobile facilities may operate in an area, rather than at a specific location, only if the applicant requests this type of discharge in their NOI, provide a map and description of the area of coverage, and the latitude and longitude of the initial location of the facility. Mobile operations will be limited to a lease sale block. The discharger will be required to notify the Director, in writing, 7 days prior to moving the facility, provide the latitude and longitude of the new location, and certify that the new discharge location is not within 200 meters of any previous discharge or any other discharge.

**E. Transfers.**

1. Authorization under this general permit is not transferable to any person except after notice to the Director.
2. Transfers under this general permit will only be authorized for an existing facility located at the site or area of the original NOI. If a different facility is built at or moved to an existing location authorized by the general permit, or if a currently authorized facility is moved to a location that was not previously authorized by the general permit, then permit authorization cannot be transferred because the facility will be considered a “new facility” and the discharger must submit a new NOI for coverage under this general permit.



**F. Termination Notification.**

1. **Operations.** Within 30 days of ceasing operations, the permittee shall notify the Director, in writing, when general permit coverage is no longer needed at a site or mobile area described by the NOI. The permittee must certify that it is not subject to any pending enforcement actions including citizen suits brought under State or Federal laws. The termination notice shall be signed in accordance with the Signatory Requirements of Section V.E of this general permit. This will terminate permit coverage at the site or within the mobile area. Termination of permit coverage shall be effective 30 days from the date of written notification from the Director that the permit coverage under this general permit has been terminated. The permittee is required to submit discharge monitoring reports (DMRs) until the effective date of termination.
2. **Wells.** The permittee shall notify the Director, in writing, within 30 days of ceasing drilling operations at a well. The notification must include the well name and number, the end-of-well report (Section II.B.9), and must be signed in accordance with the Signatory Requirements (Section V.E) of this general permit.

**G. Submission of Information.**

1. The discharger must submit legible originals of all NOIs and termination notices to the Director at the following address:

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

2. The discharger must submit legible originals of all monitoring reports, other reports required by this permit, and notice of noncompliance to the Director at the following address:

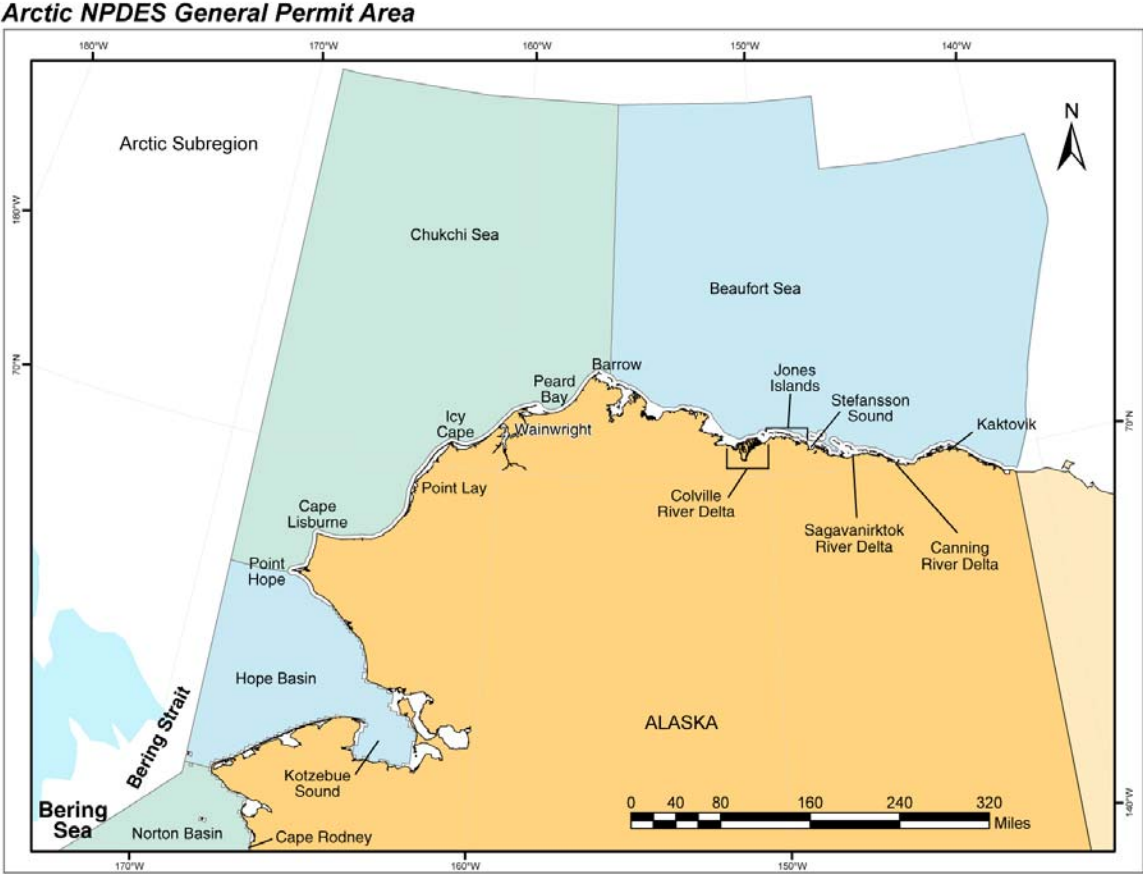
Director, Office of Compliance and Enforcement  
United States Environmental Protection Agency, Region 10  
1200 Sixth Avenue, **OCE-133**  
Seattle, Washington 98101

3. For discharges to state waters, the discharger must submit a copy of the information in paragraphs G.1 and G.2 of this Part to ADEC at the following address:

Alaska Department of Environmental Conservation (ADEC)  
Attn: Division of Water Quality  
555 Cordova Street  
Anchorage, Alaska 99501

**H. Requirements for an Individual Permit.**

1. The Director may require any permittee discharging under the authority of this permit to apply for and obtain an individual NPDES permit when any one of the following conditions exists:
  - 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. 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
  - d. 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 shall submit an individual permit application with reasons supporting the request to the Director 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 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 on the Outer Continental Shelf and Contiguous State Waters**

## II. **LIMITATIONS AND MONITORING REQUIREMENTS**

### A. **Requirements for All Discharges.**

1. During the effective period of this permit, the permittee is authorized to discharge pollutants from those discharges indicated in their discharge authorization to the Beaufort and Chukchi Seas, Hope and Northern Norton Basins, and adjacent Alaska waters (see Figure 1), within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the NOI.
2. The permittee must collect all effluent samples from the effluent stream of each discharge after the last treatment unit prior to discharge into the receiving waters.
3. 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 this permit.
4. Unless specifically addressed in this general permit, the permittee must not discharge floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind in concentrations causing nuisance, objectionable, or detrimental conditions or that make the water unfit or unsafe for the use.
5. The permittee must minimize the discharge of surfactants, dispersants, and detergents except as necessary to comply with the safety requirements of the Occupational Health and Safety Administration and the Minerals Management Service (MMS). The discharge of dispersants to marine waters in response to oil or other hazardous waste spills is not authorized by this permit. The permittee must report all discharges of surfactants, dispersants, and detergents in accordance with Section III.G of this permit.
6. The permittee is not required to conduct monitoring for the facility if it is not staffed. The permittee must provide the Director and ADEC written notification that the facility is no longer staffed 30 days prior to terminating monitoring requirements.
7. The permittee shall not discharge diesel oil, halogenated phenol compounds, trisodium nitrilotriacetic acid, sodium chromate, or sodium dichromate.

8. If any discharges are commingled, the most stringent effluent limitations for each individual discharge are applied to the resulting discharge. If the individual discharge is not authorized, the commingled discharge is not authorized.
9. The permittee must maintain the pH range of all discharges to be not less than 6.5 or greater than 8.5 standard units. The permittee must monitor pH in all discharges monthly, unless indicated otherwise in this permit.
10. 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.

**B. Requirements for Drilling Fluids and Drilling Cuttings (Discharge 001).**

1. If authorized in the coverage letter, the permittee may discharge drilling fluids and drilling 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 permit.
2. The permittee must limit and monitor the discharge volume of drilling fluids and drilling cuttings under open water, broken ice, and stable ice conditions as specified in Table 2 and in accordance with the restrictions specified in paragraphs B.3 and B.4 of this Part.
3. **Area Restrictions.** The permittee is prohibited from discharging:
  - a. In areas with water depths that is less than 5 m (as measured from mean lower low water);
  - b. Between the shore (mainland and the barrier islands) and the 5 meter isobath;
  - c. Within 1000 meters of the Steffansson Sound Boulder Patch (near the mouth of the Sagavanirktok River) or between individual units of the Boulder Patch where the separation between units is greater than 2000 meters but less than 5000 meters;
  - d. Within Omalik Lagoon;

- e. Within Kasegaluk Lagoon; or
- f. Within 3 miles of the following passes of Kasegaluk Lagoon:
  - (1) Kukpowruk Pass,
  - (2) Akunik Pass,
  - (3) Utukok Pass,
  - (4) Icy Cape Pass,
  - (5) Alokiaakat Pass,
  - (6) Naokok Pass, and
  - (7) Pingaorarak Pass.

4. **Seasonal Restrictions.**

- a. **Open-water restrictions.** The permittee is prohibited from discharging:
  - (1) at depths greater than 1 meter below the surface of the receiving water between the 5 and 20 meters isobaths as measured from the MLLW during open-water conditions.
  - (2) within 1000 meters of river mouths or deltas; or
  - (3) within Alaska State waters unless a zone of deposit (ZOD) has been authorized for the discharge by ADEC and the permittee conducts the environmental monitoring required under paragraph B.5 of this part.
- b. **Unstable or broken ice restrictions.** The permittee is prohibited from discharging:
  - (1) within 1000 meters of river mouths or deltas or
  - (2) shoreward of the 20 meter isobath as measured from the MLLW during unstable or broken ice conditions except:
    - (a) when the discharge is prediluted to a 9:1 ratio of seawater to drilling fluids and cuttings, and
    - (b) the permittee conducts the environmental monitoring required under paragraph B.5 of this part.

**c. Stable ice restrictions.**

- (1) The permittee is prohibited from discharging below the ice and shall avoid, to the maximum extent possible, areas of sea ice cracking or major stress fracturing unless authorized otherwise from the Director.
- (2) The permittee is prohibited from discharging below the ice within Alaska State waters unless a zone of deposit (ZOD) has been authorized for the discharge by ADEC and the permittee conducts the environmental monitoring required under paragraph B.5 of this part.

**5. Environmental Monitoring Requirements.**

a. The permittee must conduct the environmental monitoring requirements of this section when the authorization to discharge is within 4,000 meters of the prohibited areas identified in paragraph II.B.3 or as otherwise required by this permit.

b. The permittee must submit a plan of study for the environmental monitoring program to the Director and ADEC for review with the NOI. The permittee must incorporate any changes required by the Director or ADEC in the monitoring program's design. A copy of the final study plan must be sent to the North Slope Borough at the following address:

North Slope Borough Office  
P.O. Box 69  
Barrow, AK 99723

c. The permittee must include the following information in the environmental monitoring study plan:

- (1) the monitoring objectives (see paragraph II.B.5.d);
- (2) the appropriate null and alternate test hypotheses,
- (3) a statistically valid sampling design,
- (4) all monitoring procedures and methods,
- (5) a quality assurance project plan (see Section IV.B),
- (6) a detailed discussion of how data will be used to meet, test, and evaluate the monitoring objectives, and
- (7) a summary of the results of previous environmental monitoring as they apply to the proposed study plan.

- d. The permittee must ensure that the environmental monitoring study plan meets the following objectives:
- (1) monitor for discharge-related impacts,
  - (2) determine statistically significant changes in sediment pollutant concentrations and sediment toxicity with time and distance from the discharge,
  - (3) monitor for discharge related impacts to the benthic community,
  - (4) assess whether any impacts warrant an adjustment of the monitoring program, and
  - (5) provide information for permit reissuance.
- e. The permittee must include in the environmental monitoring study plan relevant hydrographic, sediment hydrocarbon, and heavy metal data from surveys conducted before and during drilling fluid disposal operations and up to at least one year after drilling operations cease.
- f. The permittee must submit an annual report to the Director by March 1st of the following year. Copies of the report must be sent to ADEC and the North Slope Borough. The annual report must contain the following information:
- (1) a summary of the data analysis;
  - (2) a discussion of how the environmental monitoring objectives were accomplished;
  - (3) analytical test methods used for data analysis;
  - (4) a description of any impacts of the effluent on observed sediment pollutant concentration, sediment quality, water quality, and the benthic community; and
  - (5) all relevant quality assurance/quality control information including, but not limited to, laboratory instrumentation, laboratory procedures, analytical method detection limits, analytical method precision requirements, and sample collection methodology.
- g. If the Director or ADEC require revisions to the annual report, the permittee must complete the revisions and submit a final report to the Director within 60 days of the date of the request. Copies of the final report must be sent to ADEC and the North Slope Borough.





mineral oil pill and at least a 50 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 shall be removed prior to application of a subsequent pill.

- b. Residual mineral oil concentration in the discharged drilling fluid shall not exceed 2% v/v as determined by the procedure in Attachment 9 of this permit. Should drilling fluid containing residual mineral oil pill (after pill and buffer removal) be discharged, the permittee shall report the following information within 60 days of discharge:
- (1) dates of pill application, recovery, and discharge;
  - (2) results of the 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 (see Attachment 9); and
  - (10) an itemization of other drilling fluid specialty additives contained in the discharged drilling fluid.

9. The permittee is required to submit an end-of-well report within 90 days of well completion. The permittee shall report the following for each drilling fluid system in the end-of-well report:
  - a. well name, number, latitude, longitude, beginning drill date, and well completion date;
  - b. a precise chemical inventory of all constituents other than drilling fluids added downhole, including, but not limited to, all drilling fluid additives used to meet specific drilling requirements;
  - c. the base drilling fluid type;
  - d. the name, maximum concentration, and total amount of each constituent in the discharged drilling fluid;
  - e. the total volume of each drilling fluid created and added downhole;
  - f. the total volumes of each drilling fluid discharged to surface waters; and
  - g. any diesel oil analysis conducted on the well, including the spectra from the GC or GC/MS analysis.

**Table 1. Effluent Limitations and Monitoring Requirements for Drilling Fluids and Drilling 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 <sup>note 1</sup>	Minimum 96-hour LC <sub>50</sub> of 30,000 ppm		Monthly <sup>note 17</sup>	Grab
	Drilling fluids	No discharge <sup>note 2</sup>		Daily	Grab
	Free oil	No discharge <sup>notes 3 &amp; 4</sup>		Daily	Visual
	Diesel oil	No discharge <sup>note 19</sup>		Once per well <sup>note 18</sup>	Grab
	Mercury	1 mg/kg <sup>note 5</sup>		Annual	Grab
	Cadmium	3 mg/kg <sup>note 5</sup>		Annual	Grab
	Chromium VI	--- (µg/L)		Once per well	Grab <sup>Note 20</sup>
	Silver	--- (µg/L)		Once per well	Grab <sup>Note 20</sup>
	Thallium	--- (µg/L)		Once per well	Grab <sup>Note 20</sup>
	Total aqueous hydrocarbons (TAqH)	--- (µg/L)		Once per well <sup>note 15</sup>	Grab
	Total aromatic hydrocarbons (TAH)	--- (µg/L)		Once per well <sup>note 16</sup>	Grab
	Total Volume	See II.B.6		Monthly	Estimate
Non-aqueous fluids	Drilling fluids	No discharge		Daily	Grab
Non-aqueous stock base fluid (C <sub>16</sub> -C <sub>18</sub> internal olefin, C <sub>12</sub> -C <sub>14</sub> ester or C <sub>8</sub> ester)	Mercury	1 mg/kg <sup>note 5</sup>		Annual	Grab
	Cadmium	3 mg/kg <sup>note 5</sup>		Annual	Grab
	PAH <sup>note 6</sup>	mass ratio <sup>note 7</sup> < 1x10 <sup>-5</sup>		Annual	Grab
	Sediment toxicity	ratio <sup>note 8</sup> < 1.0		Annual	Grab
	Biodegradation rate	ratio <sup>note 9</sup> < 1.0		Annual	Grab

**Table 1. Effluent Limitations and Monitoring Requirements for Drilling Fluids and Drilling Cuttings (Discharge 001)**

Discharge	Pollutant Parameter	Effluent Limitation		Monitoring Requirements	
		Average Monthly Limit	Measurement Frequency	Sample Type	
Non-aqueous cuttings	Drilling Fluids	No discharge <sup>note 3 &amp; 4</sup>		Daily	Grab
	Diesel oil	No discharge <sup>note 18</sup>		Once per well <sup>note 19</sup>	Grab
	SPP toxicity <sup>note 1</sup>	Minimum 96-hour LC <sub>50</sub> of 30,000 ppm		Monthly	Grab
	Sediment toxicity	Drilling fluid sediment toxicity ratio <sup>note 10</sup> < 1.0		Annual	Grab
	Formation oil	No discharge <sup>note 11</sup>		Daily	Grab
	Base fluid averaged over all well sections (C <sub>16</sub> -C <sub>18</sub> internal olefin stock <sup>note 12</sup> )	6.9 g NAF base fluid/100 g wet drill cuttings <sup>note 13</sup>		Annual	Grab
	Base fluid <sup>note 14</sup> (C <sub>12</sub> -C <sub>14</sub> ester or C <sub>8</sub> ester stock)	9.4 g NAF base Fluid/100 g wet drill cuttings <sup>note 13</sup>		Annual	Grab
	Total aqueous hydrocarbons (TAqH)	--- (µg/L)		Once per well <sup>note 15</sup>	Grab
	Total aromatic hydrocarbons (TAH)	--- (µg/L)		Once per well <sup>note 16</sup>	Grab
	Total Volume	See II.B.6		Monthly	Estimate

Footnotes:

- 1 As determined by the 96-hour suspended particulate phase (SPP) toxicity test in Attachment 4 of this permit.
- 2 Only upon failure of the static sheen test defined in Attachment 3 of this permit.
- 3 As determine by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).
- 4 As determined by the static sheen test defined in Attachment 3 of this permit.
- 5 Dry weight in the stock barite. Analysis shall be conducted by atomic absorption spectrophotometry. The permittee shall 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 the permittee uses the same supply of stock barite to drill subsequent wells, the permittee may submit the same analysis for those subsequent wells.
- 6 Polynuclear Aromatic Hydrocarbons.
- 7 PAH mass ratio = [mass (g) of PAH (as phenanthrene)] ÷ [mass (g) of stock base fluid] as determined by EPA method 1654, Revision A, entitled "PAH Content of Oil by HPLC/UV," December 1992.
- 8 Base fluid sediment toxicity ratio = [10-day LC<sub>50</sub> of C<sub>16</sub>-C<sub>18</sub> internal olefin, C<sub>12</sub>-C<sub>14</sub> ester or C<sub>8</sub> ester] ÷ [10-day LC<sub>50</sub> of stock base fluid] as determined by ASTM E 1367-92 method: "Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods," 1992, after preparing the sediment according to the method specified in Attachment 5 of this permit.

Footnotes (cont.):

- 9 Biodegradation rate ratio = [cumulative gas production (ml) of C<sub>16</sub>-C<sub>18</sub> internal olefin, C<sub>12</sub>-C<sub>14</sub> ester or C<sub>8</sub> ester] ÷ [cumulative gas production (ml) of stock base fluid], both at 275 days as determined by ISO 11734:1995 method: "Water quality - Evaluation of the 'ultimate' anaerobic biodegradability of organic compounds in digested sludge-- Method by measurement of the biogas production (1995 edition)" as modified for the marine environment (Attachment 6 of this permit).
- 10 Drilling fluid sediment toxicity ratio = [4-day LC<sub>50</sub> of C<sub>16</sub>-C<sub>18</sub> internal olefin] ÷ [4-day LC<sub>50</sub> of drilling fluid removed from drill cuttings at the solids control equipment] as determined by ASTM E 1367-92 method: "Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods," 1992, after preparing the sediment according to the method specified in Attachment 5 of this permit.
- 11 As determined before drilling fluids are shipped offshore by the GC/MS compliance assurance method (Attachment 7 of this permit), and as determined prior to discharge by the Reverse Phase Extraction (RPE) method (Attachment 8 of this permit) applied to drilling fluid removed from drill cuttings. If the operator wishes to confirm the results of the RPE method, the operator may use the GC/MS compliance assurance method (Attachment 7 of this permit). Results from the GC/MS compliance assurance method shall supersede the results of the RPE method.
- 12 This limitation is applicable only when the NAF base fluid meets the stock limitations defined in this table.
- 13 As determined by the American Petroleum Institute (API) report method (Attachment 9 of this permit).
- 14 Averaged over all well sections.
- 15 As determined by summing the results of EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons to measure TAH and EPA Method 610 to quantify polynuclear aromatic hydrocarbons. Sample must be collected at the same time as the SPP toxicity test, to the extent practicable.
- 16 As determined by EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons. Sample must be collected at the same time as the SPP toxicity test, to the extent practicable.
- 17 See requirement of paragraph II.B.8.b (Mineral Oil Pill).
- 18 Or upon failure of the static sheen test.
- 19 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. The method for GC analysis shall be that described in "Analysis of Diesel Oil in Drilling Fluids and Drill Cuttings" (CENTEC, 1985) available from EPA, Region 10. Gas chromatography/mass spectrometry (GC/MS) may be used if an instance should arise where the operator and the Director determine that greater resolution of the drilling fluid "fingerprint" is needed for a particular drilling mud sample.
- 20 Sample must be collected when the drilling fluid is expected to have the highest concentration of metal (e.g., after formulation and prior to use). The sample is to be collected from the water phase of the drilling fluid with the purpose of obtaining partitioning of metals from drilling fluid to the receiving water. The drilling fluid must also be analyzed for the total metal concentration (chromium must be analyzed as total chromium, not total chromium VI). Samples must be analyzed using an EPA approved method quantifiable at or below the Alaska Water Quality Standard.

<b>Table 2. Flow Limitations and Monitoring Requirements for Drilling Fluids and Drilling Cuttings (Discharge 001)</b> <sup>note 1</sup>			
<b>Water Depth</b> <sup>note 2</sup>	<b>Flow Limitation</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
0 to 5 meters	no discharge	hourly during discharge <sup>note 3</sup>	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.
- 2 As measured from the mean lower low water (MLLW).
- 3 The maximum daily limit is the maximum hourly rate recorded in any calendar day within the month.  
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 in the coverage letter, 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 permit.
2. The permittee must ensure that deck drainage contaminated with oil and grease is processed through an oil-water separator prior to discharge.

<b>Table 3. Effluent Limitations and Monitoring Requirements for Deck Drainage (Discharge 002)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free oil	---	No discharge <sup>note 1</sup>		Once per discharge event	Grab
Total volume	gal	---		Monthly	Estimated
Total aqueous hydrocarbons (TAQH)	µg/L	---		Once per discharge event <sup>note 2</sup>	Grab <sup>note 4</sup>
Total aromatic hydrocarbons (TAH)	µg/L	---		Once per discharge event <sup>note 3</sup>	Grab <sup>note 4</sup>

**Footnotes:**

- 1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in Attachment 3. For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures after breakup shall be used.
- 2 As determined by summing the results of EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons to measure TAH and EPA Method 610 to quantify polynuclear aromatic hydrocarbons.
- 3 As determined by EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons.
- 4 Sample must be collected during drilling operations.



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

1. If authorized in the coverage letter, 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 permit.
2. If the discharge is to Alaska State waters, the permittee must limit and monitor Discharges 003 and 004 as specified in Table 4a unless a mixing zone has been authorized by ADEC. If ADEC has authorized a mixing zone, the permittee must limit and monitor Discharges 003 and 004 as specified in Table 4b.
3. If the discharge is to federal waters (i.e., beyond Alaska State waters) the permittee must limit and monitor Discharges 003 and 004 as specified in Tables 5 and 6.
4. 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.
5. 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) shall apply to the mixed waste stream.

<b>Table 4a. Effluent Limitations and Monitoring Requirements for Sanitary and Domestic Wastes in Alaska Waters with no Mixing Zone (Discharges 003 and 004)</b>							
Effluent Parameter	Units	Effluent Limitations				Monitoring Requirements	
		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Minimum Daily Limit	Sample Frequency	Sample Type
Flow	mgd	---	---	0.01	---	Daily	Measured/ recorded
BOD <sub>5</sub>	mg/L	30	45	60	---	Monthly	Grab <sup>note 1</sup>
TSS	mg/L	30	45	60	---	Monthly	Grab <sup>note 1</sup>
Floating Solids & Garbage		no discharge				Daily	Visual
Foam		no discharge				Daily	Visual
Oily Sheen		no discharge				Daily	Visual
pH	s.u.	6.5 – 8.5				Monthly	Grab
Fecal Coliform Bacteria	colonies/ 100 mL	14 <sup>note 2</sup>	---	43	---	Monthly	Grab
Total Residual Chlorine <sup>note 3</sup>	mg/L	---	---	0.0075	---	Weekly	Grab
Dissolved Oxygen	mg/L	---	---	17	6	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 Must be reported as the geometric mean.
- 3 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.

<b>Table 4b. Effluent Limitations and Monitoring Requirements for Sanitary and Domestic Wastes in Alaska Waters with 100 Meter Mixing Zone<sup>4</sup> (Discharges 003 and 004)</b>							
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>				<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Average Weekly Limit</b>	<b>Maximum Daily Limit</b>	<b>Minimum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Flow	mgd	---	---	0.01	---	Daily	Measured/ recorded
BOD <sub>5</sub>	mg/L	30	45	60	---	Weekly	Grab <sup>note 1</sup>
TSS	mg/L	30	45	60	---	Weekly	Grab <sup>note 1</sup>
Floating Solids & Garbage		no discharge				Daily	Visual
Foam		no discharge				Daily	Visual
Oily Sheen		no discharge				Daily	Visual
pH	s.u.	6.0 – 9.0				Monthly	Grab
Fecal Coliform Bacteria	colonies/ 100 mL	100 <sup>note 2</sup>	---	200	---	Monthly	Grab
Total Residual Chlorine <sup>note 3</sup>	mg/L	0.5	---	1.0	---	Weekly	Grab
Dissolved Oxygen	mg/L	---	---	17	2	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 Must be reported as the geometric mean.
- 3 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.
- 4 Facilities must apply for and obtain a mixing zone authorization from ADEC (refer to Section I.D.1 of this permit) in order to be subject to the requirements in this table.

<b>Table 5. Effluent Limitations and Monitoring Requirements for Sanitary Wastes beyond Alaska Waters (Discharge 003)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Flow	mgd	---	---	Daily	Measured/ recorded
BOD <sub>5</sub>	mg/L	30	60	Weekly	Grab or composite <sup>note 1</sup>
TSS	mg/L	30	60	Weekly	Grab or composite <sup>note 1</sup>
Floating Solids & Garbage		no discharge		Daily	Visual
Foam		no discharge		Daily	Visual
Oily Sheen		no discharge		Daily	Visual
pH	s.u.	6.0 – 9.0		Monthly	Grab
Fecal Coliform Bacteria	colonies/ 100 mL	100 <sup>note 2</sup>	200	Monthly	Grab
Total Residual Chlorine <sup>note 3</sup>	mg/L	0.5	1.0	Weekly	Grab

**Footnotes:**

- 1 Composite samples must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow.
- 2 Must be reported as the geometric mean.
- 3 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.

<b>Table 6. Effluent Limitations and Monitoring Requirements for Domestic Wastes beyond Alaska Waters (Discharge 004)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Floating solids, garbage, or foam	---	No discharge		Daily <sup>note 1</sup>	Visual
Flow	mgd	---		Monthly	Estimated

**Footnote:**

1 Monitoring is only required when discharge occurs.

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

1. If authorized in the coverage letter, 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 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 permit.
  
2. The permittee must maintain an annual inventory of the quantities and rates of chemicals (other than water or seawater) added to the desalination water system. Each annual inventory must be assembled for the calendar year and submitted to the Director by March 1 of the following calendar year.

<b>Table 7. Effluent Limitations and Monitoring Requirements for Desalination Unit Wastes (Discharge 005)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

**Footnote:**

1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in Attachment 3. For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

F. **Requirements for Blowout Preventer Fluid (Discharge 006).** If authorized in the coverage letter, 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 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 permit.

<b>Table 8. Effluent Limitations and Monitoring Requirements for Blowout Preventer Fluid (Discharge 006)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

**Footnote:**

1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see Attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

**G. Requirements for Boiler Blowdown (Discharge 007).**

1. If authorized in the coverage letter, 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 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 permit.
2. The permittee must maintain an annual inventory of the type (product name) and quantity of biocides and chemicals (other than water or seawater) added to the boiler system. Each annual inventory must be assembled for the calendar year and submitted to the Director by March 1 of the following calendar year.

<b>Table 9. Effluent Limitations and Monitoring Requirements for Boiler Blowdown (Discharge 007)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

Footnote:

- 1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see Attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

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

1. If authorized in the coverage letter, 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 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 permit.
2. The permittee must maintain an annual inventory of the type (product name) and quantity of biocides and chemicals (other than water or seawater) added to the fire control system. Each annual inventory must be

assembled for the calendar year and submitted to the Director by March 1 of the following calendar year.

<b>Table 10. Effluent Limitations and Monitoring Requirements for Fire Control System Test Water (Discharge 008)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

Footnote:

1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

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

1. If authorized in the coverage letter, 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 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 permit.
2. The permittee must maintain an annual inventory of the type and quantity of biocides and chemicals added to non-contact cooling water. Each annual inventory must be assembled for the calendar year and submitted to the Director by March 1 of the following calendar year.



<b>Table 11. Effluent Limitations and Monitoring Requirements for Non-contact Cooling Water (Discharge 009)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

Footnote:

- 1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

- J. Requirements for Uncontaminated Ballast Water (Discharge 010).** If authorized in the coverage letter, 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 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 permit.

<b>Table 12. Effluent Limitations and Monitoring Requirements for Uncontaminated Ballast Water (Discharge 010)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

Footnote:

- 1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

**K. Requirements for Bilge Water (Discharge 011).**

1. If authorized in the coverage letter, 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 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 permit.
2. The permittee shall process all bilge water through an oil-water separator prior to discharge.

<b>Table 13. Effluent Limitations and Monitoring Requirements for Bilge Water (Discharge 011)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

Footnote:

- 1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

- L. Requirements for Excess Cement Slurry (Discharge 012).** If authorized in the coverage letter, 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 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 permit.

<b>Table 14. Effluent Limitations and Monitoring Requirements for Excess Cement Slurry (Discharge 012)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

**Footnote:**

1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

**M. Requirements for Mud, Cuttings, and Cement at the Seafloor (Discharge 013).** If authorized in the coverage letter, the permittee may discharge mud, 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 15. The permittee must comply with the effluent limits in Table 15 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

<b>Table 15. Effluent Limitations and Monitoring Requirements for Muds, Cuttings, and Cement at the Seafloor (Discharge 013)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Total Volume	gal	---		Monthly	Estimated

**Footnote:**

1 As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.

- N. **Requirements for Test Fluids (Discharge 014).** If authorized in the coverage letter, the permittee may discharge test fluids subject to the effluent limitations and requirements herein. The permittee must limit and monitor Discharge 014 as specified in Table 16. The permittee must comply with the effluent limits in Table 16 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

<b>Table 16. Effluent Limitations and Monitoring Requirements for Test Fluids (Discharge 014)</b>					
<b>Effluent Parameter</b>	<b>Units</b>	<b>Effluent Limitations</b>		<b>Monitoring Requirements</b>	
		<b>Average Monthly Limit</b>	<b>Maximum Daily Limit</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
Free Oil	---	No discharge <sup>Note 1</sup>		Once/discharge	Visual
Oil and Grease	mg/L	29	42	Once/discharge	Grab
pH	s.u.	6.5 – 8.5 <sup>Note 2</sup>		Monthly	Grab
Total Volume	bbl	---		Monthly	Estimated <sup>Note 3</sup>
Total aqueous hydrocarbons (TAqH)	µg/L	---		Once per discharge well <sup>note 4</sup>	Grab
Total aromatic hydrocarbons (TAH)	µg/L	---		Once per discharge well <sup>note 5</sup>	Grab

**Footnotes:**

- As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen) using the static sheen test defined in appendix 1 to 40 CFR part 435, subpart A (see attachment 3). For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature instead of approximate surface water temperatures after breakup shall be used.
- Any spent acidic test fluids shall be neutralized before discharge such that the pH at the point of discharge shall not be less than 6.5 or greater than 8.5.
- Volume will be reported as the number of barrels of fluids sent downhole during testing and the number of barrels discharged. The chemical composition of the fluids sent downhole will also be reported.
- As determined by summing the results of EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons to measure TAH and EPA Method 610 to quantify polynuclear aromatic hydrocarbons.
- As determined by EPA Method 602 (plus Xylenes) to quantify monoaromatic hydrocarbons.

### 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 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 Part I of this permit that are likely to be affected by the discharge.
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 DMR form (EPA No. 3320-1) or equivalent. The permittee must submit reports monthly, postmarked by the 10th day of the following month. Annual sampling results must be reported on the January DMR unless otherwise indicated by this permit. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Section VI.E (“Signatory Requirements”) of this permit. The permittee must submit legible originals of these documents to the Director, Office of Water, with copies to ADEC at the addresses in Section I.G (“Submission of Information”).

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

#### D. **Additional Monitoring by Permittee.**

1. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this 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 permit, copies of DMRs; a copy of this NPDES permit, and records of all data used to complete the application for this 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 or ADEC at any time.

G. **Noncompliance Reporting**

1. **Twenty-four Hour Notice of Noncompliance Reporting.**

- a. 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 health or the environment;
  - (2) any unanticipated bypass that exceeds any effluent limitation in the permit (See Section V.F, "Bypass of Treatment Facilities");

- (3) any upset that exceeds any effluent limitation in the permit (See Section V.G, “Upset Conditions”); or
    - (4) any violation of a maximum daily discharge limitation for any of the pollutants in Part I of the permit requiring 24-hour reporting.
  - b. The permittee must also provide a written submission to the Director and ADEC within five days of the time that the permittee becomes aware of any event required to be reported under paragraph III.G.1. The permittee must report all other forms of noncompliance to ADEC within seven days of the time that the permittee becomes aware of any event. Permittees may use the noncompliance notification sheet in Attachment 2 to report noncompliance. For events required to be reported under paragraph 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;
    - (4) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance;
    - (5) a detailed description of the event, including quantities and types of materials involved;
    - (6) details of any actual or potential impact on the receiving environment or public health; and
    - (7) details of actions taken or to be taken to correct any damage resulting from the event.
  - c. The Director may waive the written report required for paragraph III.G.1 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.
  - d. 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 I.G (“Submission of Information”) of this permit.

- H. **Changes in Discharge of Toxic Substances.** The permittee must notify the Director and ADEC 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 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 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 the Director in accordance with 40 CFR 122.44(f).

#### IV. SPECIAL CONDITIONS



**A. Quality Assurance Plan Requirements.**

1. Within 90 days following written notification that the Director has authorized discharge under this permit, the permittee must develop a Quality Assurance Plan (QAP) and notify the Director and ADEC, in writing, that the QAP is complete.
2. The QAP shall address the monitoring activities required by this permit. At a minimum, the following information must be provided in the QAP:
  - 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.

note: The document *Guidance for Preparation of Quality Assurance Project Plans*, EPA, Region 10, Quality and Data Management Program, QA/G-5, can be used as a helpful reference guide in preparing the QAP. This document is available in Adobe Acrobat format at <http://www.epa.gov/r10earth/offices/oea/qaindex.htm>.

3. The permittee is responsible for reviewing and updating the QAP to ensure all material is current and applicable.
4. The permittee must amend the QAP whenever there is a modification in the sample collection, sample analysis, or conditions or requirements of the QAP.
5. The permittee must keep copies of the most current QAP on site and must make the QAP available to the Director and ADEC upon request.

**B. Best Management Practices Plan Requirements.**

1. The permittee shall, during the term of this permit, operate the facility in accordance with its current Best Management Practices (BMP) Plan or in accordance with subsequent amendments to the Plan. The permittee shall notify the Director and ADEC that the BMP Plan is complete and on-site at least 7 days prior to discharge. The permittee shall ensure that the BMP Plan incorporates practices to achieve the objectives and specific requirements listed below.
2. Through implementation of the BMP Plan, the permittee shall:
  - a. Prevent or minimize the generation and the potential for the release of pollutants from the 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.
3. The permittee shall 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 facility shall 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 (SOPs) included in the Plan, the permittee shall ensure proper operation and maintenance of the facility.
  - c. The permittee shall establish specific objectives for the control of pollutants by conducting the following evaluations.

- (1) Each facility component or system shall 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 shall 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.
4. The BMP Plan shall 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, 1993) or any subsequent revisions to the guidance document. The BMP Plan shall:
- a. Be documented in narrative form, shall include any necessary plot plans, drawings or maps, and shall be developed in accordance with good engineering practices. The BMP Plan shall 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.
    - (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.
  - (7) Materials compatibility.
  - (8) Good housekeeping.
  - (9) Preventative maintenance.
  - (10) On-ice disposal methods
  - (11) Inspections and records.
  - (12) Security.
  - (13) Employee training.
- b. Include the following provisions concerning BMP Plan review:
- (1) Be reviewed by facility engineering staff and the facility manager.
  - (2) Be reviewed and endorsed by the permittee's BMP Committee.
  - (3) Include a statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement shall be certified by the dated signature of each BMP Committee member.
- 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 shall be referenced in the BMP Plan.
  - (2) Reflect requirements for Spill Prevention, Control, and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 112 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 18 AAC 50.
- (5) Address on-ice disposal methods, including on-ice spacing of discharge piles and height of accumulated drilling fluids and cuttings piles.

e. Include the following specific 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).

5. The permittee shall maintain a copy of the BMP Plan at the facility and shall make the plan available to the Director and ADEC upon request.
6. The permittee shall amend the BMP Plan whenever there is a change in the facility or in the operation of the facility that materially increases the generation of pollutants or their release or potential release to the receiving waters. The permittee shall also amend the Plan, as appropriate, when facility operations covered by the BMP Plan change. Any such changes to the BMP Plan shall be consistent with the objectives and specific requirement listed above. All changes in the BMP Plan shall be reported to the Director and ADEC in writing.
7. At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.

**C. Drilling Fluid Plan Requirements.**

1. The permittee shall develop and have on-site at all times a written procedural plan for the formulation and control of drilling fluid/additive systems for each well. The mud plan must specify the drilling fluid/additive systems to be used. The plan shall be implemented during drilling operations. An example drilling fluid plan is provided in Attachment 11.
2. The drilling fluid plan shall be available to the Agency upon request. Seven (7) days prior to commencement of discharges from a given well, the permittee shall notify the Director, in writing, that the drilling fluid plan for the well is complete and provide the well and drilling fluid information required by the NOI information sheet in Attachment 1 of this permit.
3. At a minimum, the drilling fluid plan shall provide the following information:
  - a. Types of drilling fluids proposed for discharge, the well name, well number, NPDES permit number, 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. Concentrations shall 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 shall 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 shall be listed separately from specialty or contingency additives which may be used.
- c. A record of the operator's determination of how discharge 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 an 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 shall be consistent with other permit requirements. Names and titles of personnel responsible for the drilling fluid planning process shall be included in the drilling fluid plan.

## V. COMPLIANCE RESPONSIBILITIES

- A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**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 \$32,500 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 \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$32,500]. 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 \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$157,500].



### 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 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 shall 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.** The Act provides that any person who knowingly violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any 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 \$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 shall 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.** The Act provides that any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, or any 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, shall, 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 shall 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, shall, 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 shall, 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 permit, including monitoring reports or reports of compliance or non-compliance shall, 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 shall 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 permit.
- D. **Duty to Mitigate.** The permittee must take all reasonable steps to minimize or prevent any discharge in violation of this 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 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 permit.
- F. **Bypass of Treatment Facilities.**
1. **Byapass 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 Part.

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 (“Twenty-four Hour Notice of Noncompliance Reporting”).

3. **Prohibition of bypass.**

- a. Bypass is prohibited, and the Director or ADEC 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 Part.
- b. The Director 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 Part.

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 Part. 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 Part III.G (“Twenty-four Hour Notice of 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 permit has not yet been modified to incorporate the requirement.

I. **Planned Changes.** The permittee must give notice to the Director and ADEC 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 permit, nor to notification requirements under Section III.I (“Changes in Discharge of Toxic Substances”).

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

## VI. GENERAL PROVISIONS

- A. **Permit Actions.** This permit or coverage under this 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 permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- B. **Duty to Reapply.** If the permittee intends to continue an activity regulated by this general permit after the expiration date of this 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 permit.
- C. **Duty to Provide Information.** The permittee must furnish to the Director and ADEC, within any reasonable time specified in the request, any information that the Director or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to the Director or ADEC, upon request, copies of records required to be kept by this 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 or ADEC, it must promptly submit such facts or information.
- E. **Signatory Requirements.** All applications, reports or information submitted to the Director and ADEC 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 permit and other information requested by the Director or ADEC 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 and ADEC.

3. **Changes to authorization.** If an authorization under paragraph V.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 paragraph V.E.2 must be submitted to the Director and ADEC 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 Part 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 2, information submitted to the Director pursuant to this 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 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 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 permit;
  2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this 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 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 permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

## VII. DEFINITIONS

*Act* means the Clean Water Act.

*Acute toxic unit (TUa)* is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the acute exposure period (i.e., 100/LC50).

*ADEC* means Alaska Department of Environmental Conservation.

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

*Average Monthly Limit (AML)* 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.

*Average Weekly Limit (AWL)* means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.

*Ballast water* means harbor or seawater added or removed to maintain the proper ballast floater level and ship draft.

*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.

*Boiler blowdown* means the discharge of water and minerals drained from boiler drums.

*Boulder Patch* is defined as an area that has more than 10 percent of a one-hundred-square-meter area covered by boulders to which kelp is attached.



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

*Cooling water* means once-through non-contact cooling water.

*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.

*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 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 permit, “diesel oil” includes the fuel oil present at the facility.

*Director* means the Director of the Office of Water, EPA, 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 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.

*End of Well* means after the exploratory facility has been removed from the location and a sea floor bottom survey has been completed.

*Enhanced mineral oil*, for the purposes of this 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 phenanthrene.

*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.

*Exploratory facility*, for the purposes of this permit, means any fixed or mobile structure that is engaged in the drilling of wells to determine the nature of potential hydrocarbon reservoirs.

*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.

*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.

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

*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.

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

*Maximum daily limit (MDL)* means the highest allowable “daily discharge.”

*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.

*MMS* is the Minerals Management Service.

*Muds, cuttings, cement at sea floor* means the materials discharged at the surface of the ocean floor in the early phases of drilling operations, before the well casing is set, and during well abandonment and plugging.

*New Source*, for the purposes of this permit, 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.

*Non-aqueous drilling fluid (NAF)* 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<sub>16</sub>-C<sub>18</sub> internal olefins, and C<sub>8</sub>-C<sub>16</sub> fatty acid/2-ethylhexyl esters). Types of non-aqueous drilling fluids include oil-based fluid, enhanced mineral oil-based fluid, and synthetic-based fluid.

*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.

*OCS* means the Outer Continental Shelf.

*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 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 permit.

*QA/QC* means quality assurance/quality control.

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

*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.

*Sidetracked well* means a new hole drilled from a main well to a different bottom-hole location.

*Site* means the single, specific geographical location where a mobile drilling facility (jackup rig, semisubmersible, or arctic mobile rig) conducts its activity, including the area beneath the facility, or to a location of a single gravel island.

*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.

*Stable ice* means ice that is stable enough to support discharged muds and 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.

*Step-out well* means a new hole drilled from a main well to a different bottom-hole location.

*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.

*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.

*Test fluid* means the discharge that would occur should hydrocarbons be located during exploratory drilling and tested for formation pressure and content. This would consist of fluids sent downhole during testing along with water from the formation.

*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.

*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 mean lower low water.

*4-day LC<sub>50</sub>* as applied to the sediment toxicity means the concentration (milligrams/kilogram dry sediment) of the drilling fluid in sediment that is lethal to 50 percent of the *Leptocheirus plumulosus* test organisms exposed to that concentration of the drilling fluids after four days of constant exposure.

*10-day LC<sub>50</sub>* as applied to the sediment toxicity means the concentration (milligrams/kilogram dry sediment) of the drilling fluid in sediment that is lethal to 50 percent of the *Leptocheirus plumulosus* test organisms exposed to that concentration of the drilling fluids after ten days of constant exposure.

*96-hour LC<sub>50</sub>* means the concentration (parts per million) or percent of the suspended particulate phase (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.

*C<sub>12</sub>-C<sub>14</sub> ester* and *C<sub>8</sub> ester* means the fatty acid/2-ethylhexyl esters with carbon chain lengths ranging from 8 to 16 and represented by the Chemical Abstracts Service (CAS) No. 135800-37-2.

*C<sub>16</sub>-C<sub>18</sub> internal olefin* means a 65/35 blend, proportioned by mass, of hexadecene and octadecene, respectively. Hexadecene is an unsaturated hydrocarbon with a carbon chain length of 15, and internal double carbon bond, and is represented by the Chemical Abstracts Service (CAS) No. 27070-58-2.

*C<sub>16</sub>-C<sub>18</sub> internal olefin drilling fluid* means a C<sub>16</sub>-C<sub>18</sub> internal olefin drilling fluid formulated as specified in Appendix 8 of subpart A of 40 CFR Part 435 (See Attachment 9 of this permit).