



# Fact Sheet

NPDES Permit Number: AKG-28-5100

Date:

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The United States Environmental Protection Agency (EPA)  
Plans to Reissue a  
National Pollutant Discharge Elimination System (NPDES) General Permit for

OIL AND GAS EXPLORATION  
LOCATED IN THE FEDERAL WATERS  
OF COOK INLET

## **U.S. Environmental Protection Agency's (EPA's) Proposed Action**

EPA proposes to reissue the NPDES General Permit for Oil and Gas Exploration Facilities in the Federal Waters of Cook Inlet (Draft Permit) concurrently with the State of Alaska's proposed reissuance of a similar permit in State Waters. The permit authorizes certain discharges of pollutants into Cook Inlet from oil and gas exploration facilities subject to limits and requirements designed to minimize pollution and protect water quality. The 2007 Permit, NPDES Permit No. AKG-31-5000, which authorized discharges from exploration, development and production activities in both state and federal waters in Cook Inlet, expired on July 2, 2012.

On October 31, 2012, authority to issue NPDES permits for oil and gas discharges in State Waters was delegated to the State of Alaska. EPA retains jurisdiction over discharges to Federal Waters and will provide oversight of the state's Alaska Pollutant Discharge Elimination System (APDES) permitting program.

Administratively extended coverage has been provided to development and production facilities that reapplied in a timely manner in accordance with 2007 Permit Part VII.B. Future permitting actions for development and production facilities will be undertaken by the State of Alaska as these facilities are all located in State Waters.

This Fact Sheet includes:

- information on public comment, public hearings, and appeal procedures;

- a description of the types of facilities subject to the Draft Permit;
- a description of the proposed discharges from these facilities;
- a discussion and technical material supporting the proposed effluent limitations and other conditions set forth in the Draft Permit; and
- a map and description of the proposed discharge area.

Clean Water Act Section 403 [CWA § 403] prohibits issuing an NPDES permit for discharges into marine waters located seaward of the inner boundary baseline of the territorial seas (i.e., state and federal offshore waters) except in compliance with the ocean discharge guidelines, 40 CFR Part 125, Subpart M. The guidelines set out criteria that the EPA must evaluate, called the Ocean Discharge Criteria Evaluation (ODCE), to ensure that point source discharges do not cause unreasonable degradation to the marine environment.

The ODCE developed for the Cook Inlet general permit is in draft form. After the close of the public comment period, EPA will refine the ODCE analyses and conclusions, as necessary, to reflect the agency's final decisions.

### **Public Comment and Public Hearings**

Persons wishing to comment on the Draft Permit must do so, in writing, by the end date of the public comment period. Comments should include the name, address, and telephone number of the commenter and should reference the Draft Permit name and number. Comments should also include a concise statement of their basis and any relevant facts the commenter believes EPA should consider in making its decision regarding the conditions and limitations in the Draft Permit.

All written comments and requests should be submitted to the attention of the Director, Office of Water and Watersheds at the following address:

U.S. EPA, Region 10  
1200 Sixth Avenue, Suite 900 OWW-130  
Seattle, Washington 98101

Alternatively, comments may be submitted electronically to [godsey.cindi@epa.gov](mailto:godsey.cindi@epa.gov) by the end of the public comment period.

EPA will also hold public hearings in Kenai, Homer, and Anchorage, Alaska. The dates and times of the public hearings are set forth in the Public Notice for the Draft Permit.

After the public comment period ends, EPA will review and address all submitted comments and will take them into account in making a decision on the effluent limitations and conditions for the Final Permit. EPA's Director for the Office of Water and Watersheds in Region 10 will then make a final decision regarding final issuance of the Permit. The Permit will become effective 30 days after publication in the Federal Register and will remain in effect unless stayed by the Ninth Circuit Court of Appeals in response to an appeal and motion to stay the permit conditions. Pursuant to CWA § 509(b)(1), any interested person

may appeal the permit in the Ninth Circuit Court of Appeals within 120 days following issuance of EPA's final permitting decision.

### **Availability of Documents**

The Draft Permit, Fact Sheet and Ocean Discharge Criteria Evaluation (ODCE) are available at the EPA Alaska Operations Office between 8:30 a.m. and 4:00 p.m., Monday through Friday:

The Alaska Operations Office is located at 222 West Seventh Avenue, Room 537, Anchorage, Alaska.

Copies of the above-listed draft documents are also available at:

EPA Region 10 website:

**<http://yosemite.epa.gov/r10/WATER.NSF/NPDES+Permits/DraftPermitsAK>**

U.S. EPA, Region 10  
Attn: Audrey Washington  
1200 Sixth Avenue, Suite 900 OWW-130  
Seattle, Washington 98101

EPA will send copies of the documents to the following locations:

Anchorage Municipal Library  
Z. J. Loussac Public Library  
3600 Denali St  
Anchorage, Alaska 99503-6055

Kenai Community Library  
163 Main Street Loop  
Kenai, Alaska 99601

Homer City Library  
141 West Pioneer Ave.  
Homer, Alaska 99603

Pursuant to 40 CFR § 124.9, the Administrative Record for the Draft Permit, which consist of the draft general permit, Fact Sheet, Ocean Discharge Criteria Evaluation (ODCE) and documents referenced in this Fact Sheet, are available upon request by contacting Cindi Godsey at (907) 271-6561 or [godsey.cindi@epa.gov](mailto:godsey.cindi@epa.gov).

### **State Requirements**

The Cook Inlet GP is not subject to State certification because the area of coverage is located beyond State regulated waters.

As of July 1, 2011, there is no longer a Coastal Zone Management Act (CZMA) program in Alaska. Since the CZMA Federal consistency provisions no longer apply in Alaska, consistency determinations from Federal agencies no longer require a response from the Alaska Coastal Management Program (ACMP) and may proceed in accordance with other applicable law and procedures.

### **Summary of Proposed Changes**

The Draft Permit proposes the following changes to the 2007 Permit. These changes are described in more detail in the body of this Fact Sheet.

1. Authorize discharges from exploration activities, including geotechnical activities, in Federal waters.
2. Include previously deferred areas under the Bureau of Ocean Energy Management (BOEM, formerly Minerals Management Service) lease sales.
3. Require submission of a Drilling Fluids Plan with the Notice of Intent (NOI).
4. Require reporting of Chemical Additives Inventory.
5. Require submission of the NOI 45 days prior to discharge rather than 30 days.
6. Delete requirement to submit a Notice of Termination within 30 days of cessation of discharging – allows time to submit the End-of-Well Report, due 90 days after drilling ends.
7. Update analytical method for diesel oil analysis.
8. Add static sheen testing requirements for discharges of bilge water.
9. Add requirements to comply with CWA § 316(b) Cooling Water Intake Structures.
10. Require submission of the Best Management Practices Plan with the NOI.
11. Allow opportunity for Permittees to submit Discharge Monitoring Reports in netDMR.

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## FACT SHEET

### I. INTRODUCTION

CWA § 301(a) provides that the discharge of pollutants is unlawful except in accordance with the terms of a NPDES permit. 40 CFR § 122.28(c) requires EPA to issue general NPDES permits covering discharges from offshore oil and gas facilities within the Region's jurisdiction. For Federally leased lands, the general permit area should generally be no less extensive than the lease sale area defined by the Department of Interior. General permits are mechanisms for authorizing discharges from a number of similar facilities through a single permit, rather than an individual permit for each facility. In cases such as oil and gas extraction, where new facilities are likely to begin operating during the life of the permit, general permits can offer the flexibility of authorizing discharges from those new facilities without the need to issue a new permit for each new facility.

The existing NPDES General Permit for Oil and Gas Exploration, Development and Production Facilities Located in State and Federal Waters in Cook Inlet, NPDES Permit No. AKG-31-5000 (2007 Permit), expired on July 2, 2012, but continues in effect for facilities that applied in a timely manner. The 2007 Permit authorized discharges from 19 facilities operated by Hilcorp Alaska LLC (formerly Chevron/Unocal), XTO Energy, Inc., Marathon Oil Company, ConocoPhillips Alaska, Inc., Pioneer Natural Resources Alaska Inc., Furie Operating Alaska, LLC (formerly Escopeta Oil Company LLC), and Buccaneer Alaska Operations, LLC. All of the facilities covered by the 2007 Permit are located in State Waters. Once the Alaska Department of Environmental Conservation (ADEC) reissues permits that cover these facilities, coverage under the 2007 permit will end.

There are three classifications of waters within Cook Inlet. The first two described are State Waters and the third is Federal Waters. First are the waters within the baseline (north of Kalgin Island), which are also referred to as Coastal Waters. The next is the first three miles measured seaward from the coastline or the baseline. These are also referred to as the **Territorial Seas**. Finally, seaward of the territorial seas is defined as the contiguous zone or ocean, referred to in this Fact Sheet as **Federal Waters**.

Ocean Discharge Criteria apply in the Territorial Seas and Federal Waters pursuant to CWA § 403(c), and 40 CFR Part 125, Subpart M. Technology-based limits for Federal Waters are specified in 40 CFR Part 435, Subpart A (Offshore Subcategory of the Oil and Gas Extraction Point Source Category).

EPA and the ADEC propose to reissue the exploration component of the 2007 Permit as two general permits, one in the Federal Waters (AKG-28-5100) and one in the State Waters (AKG-31-5100) of Cook Inlet (see Figure 1). This Fact Sheet provides the technical basis for AKG-28-5100.

## II. COVERED FACILITIES AND DISCHARGES

The Draft Permit authorizes and places conditions on certain discharges from oil and gas exploration facilities that are located within the Federal waters of lower Cook Inlet, described in more detail below.

### A. Types of Facilities and Typical Discharges

Exploratory operations are conducted to determine the nature of potential hydrocarbon reserves. Drilling is the main activity during exploratory operations. Typical wastewater discharges include those listed in Section II.D., below. In general, exploratory facilities do not discharge waterflood waste water, produced water, or well treatment fluids.

Operators who wish to have discharges authorized by the general permit that are not currently included in the Draft Permit must submit comments during the public comment period explaining the types of discharges, the constituents expected to occur in the discharges, the anticipated volumes, and the reasons the additional discharges are necessary to their operations.

### B. Areas of Coverage

#### 1. Area Included

The Draft Permit retains the 2007 Permit's coverage area for federal waters while AKG-31-5100 covers the 2007 Permit's coverage area for state waters. See Figure 1. The Draft Permit covers oil and gas exploration facilities located in the federal waters of Cook Inlet bounded on the west by a line from Chinitna Point to Cape Douglas (in Kamishak Bay), on the south by a line extending between Cape Douglas (at 58°51' N latitude, 153° 15' W longitude) to the north tip of Shuyak Island (at 58°37' N latitude, 152°22' W longitude) and on the east by an arc between the north tip of Shuyak Island and Port Chatham (at 59°13' N latitude, 151° 47' W longitude). See Figure 1.

The Draft Permit coverage area includes two areas that were previously identified in a Mineral Management Service (MMS, now the Bureau of Ocean Energy Management or BOEM) Lease Sales as the Lower Kenai Peninsula Deferral Area and the Barren Islands Deferral Area. Future deferrals in these areas will be determined when BOEM completes a National Environmental Policy Act (NEPA) analysis and conducts a lease sale. Their website contains the following information:

“The Cook Inlet sale is listed as a special interest sale. On March 27, 2012, BOEM issued a Request for Interest, with respect to the Cook Inlet planning area. In light of responses to the Request, BOEM decided to proceed with the pre-sale process for the Cook Inlet and to place the date for a potential lease sale in 2016 to allow time to complete the necessary steps under the Act, develop additional resource and environmental information, and

conduct analysis under NEPA” (<http://www.boem.gov/Oil-and-Gas-Energy-Program/Leasing/Five-Year-Program/Lease-Sale-Schedule/2012---2017-Lease-Sale-Schedule.aspx>).

The Draft Permit covers oil and gas exploration facilities located in the federal waters of Cook Inlet north of a line extending between Cape Douglas (at 58°51' latitude, 153° 15' longitude) on the west and Port Chatham (at 59°13' latitude, 151° 47' longitude) on the east (Figure 1).

## **2. Prohibited Areas**

The discharge prohibitions set forth in the Draft Permit and below are necessary to prevent unreasonable degradation of the areas based on the ODCE completed pursuant to 40 CFR Part 125, Subpart M.

The Draft Permit prohibits discharges in the following areas:

- In waters with a depth less than 10 meters
- In Kamishak Bay, west of a line from Cape Douglas to Chinitna Point;
- In Shelikof Strait south of a line between Cape Douglas (at 58° 51' North, 153° 15' West) on the west and the northernmost tip of Shuyak Island on the east (at 58° 37' North, 152° 22' West); and
- 20 nautical miles (nm) around Sugarloaf Island

The Draft Permit prohibits discharges in waters with a depth less than 10 meters because these shallow water discharges are less dispersed than in deeper water, and thus have a greater potential to impact the abundant aquatic life found in these shallow waters.

The Draft Permit prohibits discharges in parts of Kamishak Bay because it is either an area of high resource value, or adjacent to areas of high resource value. In addition, Kamishak Bay is a known net depositional environment where drilling mud solids and other pollutants would likely accumulate if discharges are authorized.

The Shelikof Strait area described above is outside the Draft Permit coverage area. The National Oceanic and Atmospheric Administration-Fisheries (NOAA Fisheries) has designated Shelikof Strait as a special aquatic foraging area for the Stellar Sea Lion.

Sugarloaf Island is a rookery that was designated as critical habitat that includes an aquatic zone that extends 20 nm (37 km) seaward in State and federally managed waters. See 58 Fed. Reg. 45278 (September 27, 1993); see also 50 CFR § 226.12(c)(1). Therefore, the Draft Permit does not authorize discharges in the Shelikof Strait area and within 20 nm of Sugarloaf Island.





Figure 1: Draft Permit Area of Coverage

### **C. Facilities Authorized to Discharge**

The Draft Permit authorizes the discharge of the waste streams listed in Section II.D., below, subject to the conditions and requirements set forth in the Draft Permit. Since exploratory wells do not generally discharge produced water, the Draft Permit does not authorize the discharge of produced water from exploratory facilities. The 2007 Permit limited exploratory operations to a maximum of five wells per site and the Draft Permit retains this limitation.

New Sources do not include new exploratory facilities because exploration is conducted at a particular site for a short duration and generally consists of drilling only one to three wells. See 59 FR 12454 (Mar. 4, 1993). In general, exploratory facilities differ from New Sources in that they do not have high volume discharges, and they do not discharge produced water. Moreover, the volume of drilling fluids and drill cuttings discharged from an exploratory facility is significantly less than from a development facility, where up to fifty wells can be drilled. According to EPA regulations at 40 CFR 122.29(b)(2) and (c)(1), only new sources are required to comply with NEPA. Therefore, a NEPA evaluation has not been prepared for this permit action.

### **D. Authorized Discharges**

The Draft Permit authorizes the discharges from the following waste streams (outfall numbers are in parentheses):

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

## **III. Authorization to Discharge.**

### **A. Application**

40 CFR § 122.28(b)(2)(i) requires operators seeking coverage under a general permit to submit a Notice of Intent (NOI) to be covered by the general permit. Submitting a complete and timely NOI fulfills the NPDES permit application requirements.

## B. Notice of Intent (NOI)

40 CFR § 122.28(b)(2)(ii) requires that the NOI contain information necessary for adequate program implementation. The following information must be provided in the NOI:

1. Applicant Information. The Draft Permit requires the applicant to provide the owner's or operator's legal name, mailing address, contact name, and telephone number as well as the facility's name, mailing address, contact name, and telephone number.
2. Location of discharge. The Draft Permit requires the applicant to provide the name of the lessor (i.e., BOEM); the lease and block numbers of operations and discharges; the latitude, longitude and the GIS coordinates of the facility; the range of water depths below mean lower low water (MLLW) in the lease block; and the water depths for each discharge. In addition, the Draft Permit requires the applicant to provide the type of drilling rig used for exploratory operations (i.e., jackup, drillship, semisubmersible, etc.).

Mobile facilities may operate in an area, rather than at a specific location. The applicant must request this type of coverage in their NOI, provide a map and description of the area of coverage, and the latitude, longitude and GIS coordinates of the initial location of the facility. Written notification is required prior to moving the facility and must include the latitude, longitude and GIS coordinates of the new location.

3. Commencement date of discharge. The Draft Permit requires the applicant to provide the initial date and expected duration of operations.
4. Environmental reports. The Draft Permit requires the applicant to provide copies of any exploration plans, biological surveys, and environmental reports required by BOEM. If these documents do not exist, the Draft Permit requires the applicant to provide notice that such documents do not exist.
5. Wells. The Draft Permit requires the applicant to submit the following for each well: the initial date of drilling, the well name, the well number (i.e., #1, #2, etc.), the latitude, longitude and GIS coordinates of each well, the well hole diameter, the category of mud(s) used (e.g., water-based, oil-based, synthetic-based, etc.), the type or group of mud used (e.g., lignosulfonate muds, lime muds, etc.), the solids removal process, and a complete Drilling Fluids Plan.
6. Discharges. The Draft Permit requires each applicant to identify the types and estimated volumes of discharges from the facility. In addition, the Draft Permit requires the applicant to indicate the type of sanitary discharge that will occur, if any (i.e., M10 or M9IM).
7. Line Drawing. The Draft Permit requires that the applicant submit a line drawing showing the flow of waste streams from the facility.

### **C. Deadlines for Submitting NOI.**

The 2007 Permit required each applicant to submit an NOI at least 30 days prior to the commencement of discharges from a facility. The Draft Permit proposes to extend this submission date to 45 days prior to discharge to give more flexibility in reviewing NOIs. Authorization to discharge can occur at any time after the NOI review is complete.

### **D. Date of Authorized Discharge.**

40 CFR § 122.28(b)(2)(iii) requires a general permit to specify the date(s) when it authorizes an applicant to begin discharging. The Draft Permit authorizes a facility to begin discharging when the applicant receives written authorization from EPA. The written authorization also assigns the facility an NPDES permit number.

### **E. Transfers.**

Under 40 CFR § 122.41(l)(3), permit coverage for a given facility may be transferred from an existing owner to a new owner with notification to EPA. The Draft Permit would authorize such transfers only for an existing facility located at the site designated in the original NOI. Discharge authorizations for a particular facility may not be transferred to a new facility at the same site, nor do they apply to the same facility at a new location.

### **F. Termination Notification.**

EPA may terminate coverage under an NPDES permit for the reasons, and using the procedures, provided in 40 CFR § 122.64.

If a permittee wishes to terminate coverage, the Draft Permit requires the permittee to provide notice of termination to EPA. The notice must include certification that the facility is not subject to an enforcement action or citizen suit. The notice must also include any final reports required by the permit.

### **G. Requiring an Individual Permit.**

40 CFR § 122.28(b)(3) provides situations where EPA may require, or the discharger may request, an individual NPDES permit. These situations have been incorporated into Draft Permit Part I.H.

## **IV. BASIS FOR PERMIT CONDITIONS**

### **A. Legal Basis**

CWA § 301(a), prohibits the discharge of pollutants to waters of the United States unless authorized pursuant to a NPDES permit. CWA § 402, authorizes EPA to issue NPDES permits authorizing discharges subject to limitations and



requirements imposed pursuant to CWA §§ 301, 304, 306, 401, and 403. Pursuant to these statutory provisions, NPDES permits must include effluent limitations that require the discharger to (1) meet standards reflecting levels of technological capability, (2) comply with EPA-approved State water quality standards, (3) comply with other State requirements adopted pursuant to CWA § 510 and (4) cause no unreasonable degradation to the territorial seas, contiguous zone, or oceans. In general, the CWA requires that the effluent limits for a particular permit are the more stringent of either a technology-based limit or a water quality-based limit. Moreover, NPDES permits impose reporting/information gathering requirements pursuant to CWA § 308.

## **1. Technology-Based Limits**

For conventional pollutants (*see 40 CFR 401.16*), CWA § 301(b)(1)(E) requires the imposition of effluent limitations based on best conventional pollutant control technology (BCT). For nonconventional and toxic pollutants, CWA § 301(b)(2)(A), (C), and (D) require the imposition of effluent limitations based on best available technology economically achievable (BAT). CWA § 301(b) requires compliance with BCT and BAT no later than March 31, 1989.

EPA promulgated final ELGs specifying BCT, BAT, best practicable control technology currently available (BPT), and New Source Performance Standards (NSPS) for the Offshore Subcategory of the Oil and Gas Point Source Category. These ELGs were published in the Federal Register (FR) at 58 FR 12,454, on March 4, 1993, and were codified at 40 CFR Part 435, Subpart A. EPA modified the ELGs to add technology-based standards for discharges associated with the use of synthetic-based drilling fluids. See 66 Fed. Reg. 6,850 (Jan. 22, 2001).

## **2. Water Quality-Based Limits**

### **a. Limits Based on State Water Quality Standards**

CWA § 301(b)(1)(C) requires that NPDES permits contain the necessary limitations and monitoring requirements to ensure compliance with State water quality standards. State water quality standards apply only in Coastal Waters and Territorial Seas; they do not apply in the Federal Waters covered by this Draft Permit.

### **b. Limits Based on Ocean Discharge Criteria**

CWA § 403 requires NPDES permits for discharges into Federal Waters (southern Cook Inlet in the case of this permit), to comply with the Ocean Discharge Criteria for determining the potential for unreasonable degradation of the marine environment. See 40 CFR Part 125, Subpart M. The Ocean Discharge Criteria are intended to "prevent unreasonable degradation of the marine environment and to authorize imposition of effluent limitations, including a prohibition of discharge, if necessary, to

ensure this goal." See 49 FR 65942 (Oct. 3, 1980).

Under the Ocean Discharge Criteria, EPA may issue an NPDES permit if it determines that a discharge will not cause unreasonable degradation to the marine environment. If insufficient information exists to make such a determination prior to permit issuance, EPA may only issue the permit if the discharge will not cause irreparable harm to the marine environment while additional monitoring is undertaken, and if there are no reasonable alternatives to on-site disposal.

An Ocean Discharge Criteria Evaluation (ODCE) has been prepared to assist in determining whether the discharges will cause unreasonable degradation to the marine environment. EPA has considered the factors set forth in 40 CFR § 125.122 in the ODCE.

### 3. Summary of Legal Basis for Limits

The Draft Permit contains a number of limitations and monitoring requirements to ensure compliance with Ocean Discharge Criteria.

Table 1, below, summarizes the regulatory basis for the limitations and conditions in the Draft Permit.

Table 1 Regulatory Basis for Permit Limitations	
<u>Discharge &amp; Permit Condition</u>	<u>Statutory Basis</u>
<b>Drilling Fluids and Drill Cuttings (001)</b>	
flow rate limitations	CWA § 403
depth related limits	CWA § 403
Volume	CWA § 308
Drilling Fluids Plan	CWA §§ 308, 304, 402
Toxicity	BAT
no free oil	BCT, BAT
no oil-based fluids	BPT, BCT, BAT
no diesel	BAT
mercury & cadmium in barite	BAT
monitor metals	CWA § 308
inventory of added substances	CWA § 308
environmental monitoring requirement	CWA § 403
<b>Deck Drainage (002)</b>	
no free oil	BPT, BCT, BAT

Table 1 Regulatory Basis for Permit Limitations	
<b><u>Discharge &amp; Permit Condition</u></b>	<b><u>Statutory Basis</u></b>
monitor whole effluent toxicity (direct discharge only)	CWA § 308
<b>Sanitary Wastes (003)</b>	
chlorine (facilities >10 people)	BCT
no floating solids	BCT
monitor flow rate	CWA § 308
Marine Sanitation Devices (fecals, solids, chlorine)	CWA § 312
<b>Domestic Wastes (004)</b>	
no foam	BAT
no floating solids	BCT
monitor flow rate	CWA § 308
<b>Miscellaneous Discharges (005-013)</b>	
monitor flow rate (all)	CWA § 308
no free oil (006, 010, 011, 012, 013)	BPT
inventory chemicals added (005 - 011)	CWA § 308

## B. Technology-Based Permit Requirements

The Draft Permit contains technology based limitations and conditions as required under the ELGs. The ELGs establish BCT, BAT, and BPT for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category. See 40 CFR Part 435, Subpart A. This section describes the associated technology-based limitations and monitoring requirements for the individual waste streams that the Draft Permit authorizes.

### 1. Drilling Fluids & Drill Cuttings (001)

#### a. Drilling Fluids

The technology-based limitations for drilling fluid discharges in the Draft Permit are based on the ELGs establishing BAT for Cook Inlet. The Draft Permit retains the 2007 Permit limitations.

Based on the ELGs, the Draft Permit, like the 2007 Permit, includes the following limits and prohibitions: (1) no discharge of free oil; (2) no discharge of diesel oil; and, (3) a toxicity limit of 3% by volume. The Draft Permit limits the discharge of organic contaminants through these free oil

and diesel oil discharge prohibitions, and also by restricting the use of mineral oil in drilling fluids. Permittees must measure free oil in drilling fluid discharges using the static sheen test method. The method for assuring diesel is not present has been updated from the method for GC analysis described in “Analysis of Diesel Oil in Drilling Fluids and Drill Cuttings” (CENTEC, 1985) to EPA SW846 Method 8015C (2007). Permittees must measure toxicity using a 96-hour LC<sub>50</sub> on the suspended particulate phase using the *Leptachirus plumniosus* species.

Stock barite, which is added to drilling fluids as a weighting agent, contains cadmium and mercury. Barite is the main source of heavy metals in drilling fluid discharges. Pursuant to the ELGs, the Draft Permit, like the 2007 Permit, establishes effluent limitations for cadmium and mercury of 3 mg/kg and 1 mg/kg, respectively. The Draft Permit requires permittees to report cadmium and mercury concentrations measured in the stock barite before it is added to the drilling fluids, using EPA Method 245.5 or 7471 for mercury and EPA Method 200.7 for cadmium. The technology-based limits for cadmium and mercury are surrogate parameters for other metals contained in the barite.

The Draft Permit retains the 2007 Permit prohibitions on discharges of oil-based drilling fluids, inverse emulsion drilling fluids, oil-contaminated drilling fluids, and drilling fluids to which mineral oil has been added. The purpose of these prohibitions is to ensure compliance with the toxicity limit and the prohibition against the discharge of free oil. The Draft Permit allows an exception (Permit Part II.B.3.a.) to those prohibitions for drilling fluids to which a mineral oil pill has been added. A pill is defined as a discrete amount of mineral oil circulated through a well to free stuck pipe.

The Draft Permit prohibits all discharges of non-aqueous based drilling fluids, also known as synthetic-based drilling fluids except when non-aqueous based drilling fluids adhere to drill cuttings, pursuant to the Offshore Category ELGs, as amended in 2001. The limitations that apply to drill cutting discharges are set forth in Section IV.1.b., below.

While drilling is under way, the volume of drill cuttings and drilling fluids discharged depends on the rate at which wells are drilled, the depth of the well and the resulting volume of cuttings that are brought to the surface. When drilling is completed, facilities typically discharge the remaining drilling fluids in bulk.

The draft Cook Inlet GP requires the development and implementation of a Drilling Fluid Plan. The basis for the Drilling Fluids Plan requirement is CWA §§ 308 and 403(c). The Drilling Fluids Plan requirement is also based upon the Pollution Prevention Act (PPA) and its policy of prevention, reduction, recycling, and treatment of wastes (PPA § 102(b)) through measures that include process modification, materials substitution, and improvement of management (PPA § 107(b)(3)).



A goal of the Drilling Fluids Plan is to ensure that personnel on-site are knowledgeable about the information needed and the methods required to formulate the drilling fluids/additive systems to meet the effluent toxicity limit and minimize addition of toxic substances.

The Drilling Fluids Plan also requires clearly stated procedures for situations where additives not originally planned for or included in the toxicity estimations are proposed for use later, and whether any new additive may be used and discharged. The criteria for making changes to the additive make up of a drilling fluid system must be specified in the Drilling Fluids Plan.

b. Drill Cuttings

The main source of pollutants in drill cutting discharges come from drilling fluids that are used in drilling a well, which then adhere to the drill cuttings. Therefore, based on the ELGs for BAT, BCT, and BPT, the Draft Permit, like the 2007 Permit, subjects drill cuttings discharges to the same limits that apply to drilling fluid discharges.

As noted above, the Draft Permit authorizes the discharge of drill cuttings generated using synthetic-based drilling fluids. The use of synthetic-based fluids is a type of pollution prevention technology because the drilling fluids are not disposed of through bulk discharge at the end of drilling. Instead, the drilling fluids are brought back to shore and refurbished so that they can be reused. In addition, drilling with synthetic based fluids allows operators to drill a slimmer well and results in less erosion of the well during drilling than when water-based fluids are used. Thus, the volume of drill cuttings that are discharged is reduced. The Draft Permit requires removal of synthetic-based drilling fluids from the drill cuttings prior to discharge, which is not required when water-based fluids are used.

The ELGs also include limits for sediment toxicity, biodegradation and polynuclear aromatic hydrocarbons (PAHs). Although the ELGs do not address specific types of synthetic-based fluids, these limits are incorporated into the Draft Permit to ensure the use of less toxic fluids that have a higher biodegradation rate.

The Draft Permit contains the following limits for synthetic-based fluids: (1) For stock synthetic fluids prior to combination with other components of the drilling fluid system, the Draft Permit imposes limits on PAHs, sediment toxicity (10-day), and biodegradation rate; (2) Combined fluid components are limited for formation oil contamination, measured using gas chromatography/mass spectrometry (GC/MS); and (3) Drilling fluids that adhere to drill cuttings are limited for sediment toxicity (96-hour), and formation oil contamination as measured by either a reverse phase extraction test or GC/MS.

## **2. Deck Drainage (002)**

For deck drainage discharges, the Offshore ELG for BAT and BCT require a limitation of no discharge of free oil as determined by the presence of film, sheen, or a discoloration of the surface of the receiving water. In broken, unstable, or stable ice conditions, the Draft Permit requires a static sheen test. Treatment through an oil-water separator is required for deck drainage contaminated with oil and/or grease. This limit and requirements were in the 2007 Permit and are retained in the Draft Permit.

## **3. Sanitary Waste Water (003)**

For sanitary waste discharges, the Offshore ELGs for BCT requires total residual chlorine to be maintained as close to 1 mg/l as possible for facilities that are continuously manned by ten or more persons. The ELGs also require no discharge of floating solids for offshore facilities that are continuously manned by nine or fewer persons or intermittently manned by any number of persons. These limits were in the 2007 Permit and are retained in the Draft Permit.

## **4. Domestic Waste Water (004)**

For domestic waste water discharges, the ELGs prohibit the discharge of floating solids, garbage or foam and require compliance with 33 CFR Part 151. This limit was in the 2007 Permit and has been retained in the Draft Permit.

## **5. Miscellaneous Discharges (005 – 013)**

a) The Draft Permit authorizes the following miscellaneous discharges:

- desalination unit waste (005)
- blowout preventer fluid (006)
- boiler blowdown (007)
- fire control system test water (008)
- non-contact cooling water (009)
- uncontaminated ballast water (010)
- bilge water (011)
- excess cement slurry (012)
- muds, cuttings, and cement at the seafloor (013)

The Draft Permit limits these discharges to no free oil as monitored by the visual sheen test method. The Draft Permit requires discharges of bilge water to be treated in an oil-water separator. The Draft Permit also requires operators to sample bilge water discharges for free oil using the static sheen test method once per discharge event. In addition, the Draft Permit requires operators to maintain a precise inventory of the type and quantity of chemicals added to any of these discharges. The ELGs do not address

these miscellaneous discharges.

b) *Chemically-Treated Sea Water and Fresh Water Discharges*

Operators use a broad range of chemicals to treat seawater and freshwater used in offshore operations. The available literature shows that more than twenty biocides are commonly used. These include derivations of aldehydes, formaldehyde, amine salt, and other compounds. The toxicity of these compounds to marine organisms as measured with a 96-hour LC<sub>50</sub> test is reported to range from 0.4 mg/l to greater than 1000 mg/l. Scale inhibitors are also used to treat seawater and freshwater. The scale inhibitors commonly used are amine phosphate ester and phosphonate compounds. Scale inhibitors are generally less toxic to marine life than biocides with 96-hour LC<sub>50</sub> concentrations shown to be from 1,676 mg/l to greater than 10,000 mg/l. 96-hour LC<sub>50</sub> values for corrosion inhibitors were reported to range from 1.98 mg/l to 1050 mg/l. See Chemical Treatments and Usage in Offshore Oil and Gas Systems (May 1992).

The Draft Permit maintains the requirements of the 2007 Permit to regulate chemically treated sea water and fresh water discharges, which utilized a limitation on the input rather than attempting to limit the discharge of specific biocides, scale inhibitors and corrosion inhibitors. Due to the large number of chemical additives used, it would be very difficult to develop technology-based limits for each individual additive. In addition, if the Draft Permit were to limit specific chemicals, it could potentially halt the development and use of new and potentially more beneficial treatment chemicals.

Many of the chemicals normally added to seawater or freshwater, especially biocides, have manufacturer's recommended maximum concentrations or EPA product registration labeling. In addition, information obtained from offshore operators demonstrates that it is unnecessary to use any of the chemical additives or biocides in concentrations greater than 500 mg/l. Therefore, the Draft Permit limits discharges of seawater or freshwater to the most stringent of the following:

- 1) the maximum concentrations and any other conditions specified in the EPA product registration labeling if the chemical additive is an EPA registered product;
- 2) the maximum manufacturer's recommended concentration; or
- 3) 500 mg/l.

Compliance with this limit is calculated based on the amount of treatment chemicals added to the volume of water discharged.

The Draft Permit requires permittees to keep an inventory of all chemical additives used for Discharges 005-011. Chemical additives include, but are

not limited to, treatment chemicals, biocides, insecticides and corrosion inhibitors. The Draft Permit also includes requirements for monitoring and reporting of the rates of additive use and locations of use in the processes on the facility.

As with the other miscellaneous discharges described above, the Draft Permit contains BCT limits prohibiting the discharge of free oil for chemically-treated seawater and freshwater discharges. Free oil is a direct measurement of oil contamination and the Draft Permit uses it as a surrogate parameter for conventional pollutants in these discharges.

The Draft Permit retains these limitations and monitoring requirements when treatment chemicals such as corrosion inhibitors or biocides are added. These provisions were included in previous iterations based on BPJ analysis and according to CWA § 402(o), a permit may not be reissued to contain effluent limitations which are less stringent than the previous permit.

- c) The draft Cook Inlet GP also implements cooling water intake structure provisions of the CWA § 316(b), Phase III regulations (40 CFR Part 125, Subpart N). Subpart N is applicable to all oil and gas facilities that are subject to the offshore or coastal subcategories of the Oil and Gas Extraction Point Source Category (i.e., Subparts A and D), that commenced construction after July 17, 2006, and that meet the definition of a new facility at 40 CFR § 125.83.

## **6. All Discharges**

The Draft Permit prohibits the discharge of rubbish, trash and other refuse based on the International Convention for the Prevention of Pollution from Ships (MARPOL). The Draft Permit also prohibits the discharge of sand-blasting waste. Operators typically use management practices such as enclosing areas being sand blasted in tarps to capture and properly dispose of as much of the waste as practicable. The Draft Permit clarifies that the use of reasonable measures would meet the intent of the discharge prohibition.

## **C. Water Quality-Based Permit Conditions**

The Draft Permit establishes water quality-based limitations and monitoring requirements necessary to ensure that the authorized discharges comply with the CWA's Ocean Discharge Criteria (see Section II.B.2 of this Fact Sheet). The rationale used to develop these permit requirements is described below.

### **1. Ocean Discharge Criteria**

CWA § 403 prohibits issuing an NPDES permit for discharges into marine waters located seaward of the inner boundary baseline of the territorial seas (i.e., state and federal offshore waters) except in compliance with the ocean discharge guidelines, 40 CFR Part 125, Subpart M. The guidelines set out criteria that the EPA must evaluate to ensure that point source discharges do

not cause unreasonable degradation to the marine environment. The criteria are set out in 40 CFR § 125.122.

After the evaluation, EPA: (a) may issue an NPDES permit if the proposed discharge will not cause unreasonable degradation to the territorial seas, contiguous zones, and oceans (40 CFR § 125.123(a)); (b) will not issue an NPDES permit if the proposed discharge will cause unreasonable degradation (40 CFR § 125.123(b)); or (c) may issue an NPDES permit where there is insufficient information to make an unreasonable degradation determination, if the EPA also determines that the discharge will not cause irreparable harm to the marine environment while further evaluation is undertaken, that there are no reasonable alternatives to on-site discharge, and that the discharge will comply with certain mandatory permit conditions, including a bioassay-based discharge limitation and monitoring requirements (40 CFR § 125.123(c)-(d)).

When reaching a determination that a proposed discharge will not cause unreasonable degradation, EPA may rely on any necessary conditions specified in 40 CFR § 125.123(d). These conditions include seasonal restrictions on discharges, process modifications, a monitoring program to assess discharge impacts, bioaccumulation tests, and any other conditions deemed necessary because of local environmental conditions. In addition, 40 CFR § 125.123(d)(4) authorizes the EPA to modify or revoke a permit at any time if, on the basis of new data, the EPA determines that continued discharges may cause unreasonable degradation of the marine environment.

The EPA has prepared a draft ODCE for the draft Cook Inlet general permit. The evaluation process informed EPA's permit development process, which resulted in retaining some permit conditions and enhancing others (e.g., environmental monitoring program, chemical additive inventory and limitations, area restrictions, discharge depth restrictions, minimization of the discharge of surfactants, dispersants and detergents etc.) in the Draft Permit. The additional conditions allowed EPA to reach a determination that authorized discharges will not cause unreasonable degradation to the marine environment.

EPA will refine and finalize the ODCE document prior to issuing the final permit decision.

## **2. Mixing Zones**

Mixing zones are established by EPA to specify a limited portion of a water body in which otherwise applicable water quality criteria may be exceeded. In Federal Waters, State standards do not apply; thus, mixing zones are governed solely by the Ocean Discharge Criteria.

As discussed above, Ocean Discharge Criteria must be implemented in NPDES permits for discharges to marine waters beyond the baseline (i.e. the territorial seas, contiguous zones and the oceans). The Ocean Discharge Criteria define mixing zones to be that portion of the water body that extends laterally a

distance of 100 meters from the discharge point but could possibly be redefined. See 40 CFR § 125.121(c). EPA utilized the dilution from this size mixing zone to establish toxicity triggers for discharges of chemically-treated sea water. When data is available from these discharges in federal waters, EPA will determine whether the definition of mixing zones should be reconsidered.

### **3. Water Quality Analysis and Limits**

#### **a. Dispersion Modeling**

For the 2007 Permit, EPA used the CORMIX model to conduct dispersion modeling to analyze and develop the Draft Permit's dilution factors used to set the trigger levels for Whole Effluent Toxicity (WET). EPA has found that CORMIX is an appropriate model for discharges authorized under NPDES permits for oil and gas related discharges.

The CORMIX model basically provides a snapshot of dilution in time. When considering a particular point in time, the current is moving in only one direction. In modeling the dilution-with-distance estimation with CORMIX, it is the magnitude of the current that is important, not its direction only positive current speeds are included. The purpose of the modeling is to determine the maximum radius of a mixing zone at an instant in time. In addition, CORMIX can be used in a wide variety of discharge conditions and is capable of simulating the dispersion of discharges in the far field.

The name given the waterbody in an analysis (whether "estuary" or "ocean") is not determinative of the dilution analysis. The determining factors are the inputs to the model. In the dilution analysis for the 2007 Permit, a 90<sup>th</sup> percentile current speed was used which is suggested in EPA's Technical Support Document for Water Quality-based Toxics Control as an input for estuarine modeling. CORMIX is able to account for boundary interactions such as the effluent plume becoming trapped in a water column or striking a physical boundary such as the bottom or surface. Other conditions like tidal reversal, slack tides, and tidal reflux were also considered.

#### **b. Chemically-Treated Sea Water Discharges**

The Draft Permit includes water quality-based requirements for miscellaneous discharges (Outfalls 005 – 011) to which treatment chemicals, such as biocides, are added. WET triggers in the Draft Permit are based on a combination of a standard and the dilution determined from the modeling discussed in Section IV.C.2., above. For the standard, EPA defaulted to the Alaska Water Quality Standard of 1 TU<sub>c</sub>. The triggers are not limits and are only utilized to initiate an investigation of the causes of toxicity if the trigger is exceeded. The Draft Permit contains WET and free



oil requirements because they are necessary ensure there is not unreasonable degradation to the marine environment.

Operators will be able to use treatment chemicals that are most efficient for their operation as long as they will enable the facility to consistently meet effluent limits. While this approach will ensure the protection of water quality, it will also provide maximum flexibility for operators to switch to newer products that may become available. Therefore, to ensure flexibility, the Draft Permit does not prescribe specific chemical additives that may be used.

#### 1) Toxicity Requirements

As calculated, the toxicity triggers will prevent the discharge of pollutants in concentrations that result in chronic toxicity at the edge of a 100 meter mixing zone. If a trigger is exceeded, additional testing and an investigation are required to determine the cause of the exceedence.

For the 2007 Permit, EPA calculated critical dilutions at which the toxicity limits must be met using the CORMIX model. The input parameters for ambient water conditions used for produced water mixing zones for Production Facilities were used to calculate the critical dilutions shown below. Based on suggestions from Robert Doneker, a co-developer of the CORMIX model, EPA simulated these discharges using a mirror image approach. In the mirror image approach, the discharges were modeled as being denser than sea water and located on the sea floor. The plumes were shown to initially rise from the discharge pipe and then sink back to the seafloor in much the same way that a buoyant plume would initially sink and then float back to the water's surface. The discharge velocities were set at approximately 11 meters per second in an attempt to represent the impacts resulting from discharges being made above the surface. Triggers were also calculated for subsurface discharges. Inclusion of triggers for discharges made both below and above the surface will accommodate any new platforms that may be placed in Cook Inlet in the future. The modeling results are shown below in Tables 2 and 3.

Discharge Rate (gpd)	Critical Dilution	Toxic Units
10,000 to 17,000	0.24%	417
17,001 to 22,000	0.27%	370
22001 to 27,000	0.29%	345
27,001 to 55,000	0.36%	278
55,001 to 150,000	0.46%	217
Greater than 150,000	0.62%	161

<b>Table 3</b> <b>Chemically Treated Sea Water Dispersion</b> <b>Modeling Results (Submerged Pipe)</b>		
Discharge Rate (gpd)	Critical Dilution	Toxic Units
10,000 to 17,000	0.33%	303
17,001 to 22,000	0.36%	278
22001 to 27,000	0.37%	270
27,001 to 55,000	0.49%	204
55,001 to 150,000	0.62%	161
Greater than 150,000	0.99%	101

Discharges less than 10,000 gallons per day will be very dilute and are not likely to exhibit toxic effects at the edge of the mixing zone so toxicity triggers are not proposed for these discharges.

The Draft Permit includes Tables 7A and 7B so that operators can obtain their toxicity requirements based on their discharge rate.

In the 2007 Response to Comments, EPA said that the data submitted during the permit cycle would be evaluated to see if limits were warranted. Data entered into the Integrated Compliance Information System (ICIS) from facility Discharge Monitoring Reports, from both production and exploration facilities, document information for only two of the miscellaneous discharges with one result for Outfall 007 and six for Outfall 009. With this small amount of information, EPA is proposing to retain the triggers in the next permit cycle and reevaluate the need for WET effluent limitations in the reissuance of the next permit.

## 2) Free Oil Limitations

The Draft Permit limits the discharge of free oil to control the discharge of toxic pollutants contained in oil. The Ocean Discharge Criteria include ten factors that must be considered in determining whether a discharge will cause unreasonable degradation of the marine environment. See 40 CFR § 125.122. One of the ten factors is the potential impact on human health through direct and indirect pathways. 40 CFR § 110.3 defines quantities of oil that may be harmful to public health or welfare as a discharge that causes a sheen or discoloration on the receiving water. Therefore, the Draft Permit limits chemically-treated sea water discharges to no free oil as measured using the visual sheen test method.

Free oil must be monitored weekly while the facility is discharging using the visible sheen method when an observation is possible. If discharge needs to occur when an observation is not possible, the static sheen method is required.



### 3) Whole Effluent Toxicity

The Draft Permit requires monitoring for toxicity once per quarter during discharge activities.

If the effluent analytical results are below the toxicity triggers for four consecutive quarters, the Draft Permit allows a reduction in toxicity monitoring to once every six months.

If chronic toxicity is detected above the permit trigger values set forth in Permit Part II.F.4, collection and analysis of one additional sample is required within two weeks of receipt of the test results.

If chronic toxicity is detected in the additional sample, then the permittee must conduct accelerated testing consisting of four tests, one every 2 weeks over an eight week period. If chronic toxicity triggers are exceeded during accelerated testing, the permittee must initiate a toxicity reduction evaluation (TRE).

After accelerated testing is complete, sample collection and analysis will return to quarterly until either monitoring can be reduced or accelerated testing is triggered again.

#### **c. Sanitary Waste Water Discharges**

As required by the ELG at 40 CFR 435.12 (BCT) and 435.14 (BPT), the Draft Permit limits the total residual chlorine concentration to a minimum of 1 mg/l and maintained as close to this concentration as possible for facilities continuously manned by ten (10) or more persons.

Since State water quality standards do not apply in Federal Waters, no maximum total residual chlorine limit is proposed for facilities located in Federal Waters.

#### **D. Baseline Monitoring Requirements**

The 2007 Permit required operators of any new facilities installed during its five year term conduct baseline monitoring. During the term of the 2007 Permit, no new facilities were installed within the area covered by the Draft Permit.

The Ocean Discharge Criteria require a full understanding of the potential impacts of permitted discharges. To ensure that the discharges will not result in unreasonable degradation, the Draft Permit includes the monitoring requirements from the 2007 Permit. This monitoring requirement applies to all facilities.

#### **E. Traditional Ecological Knowledge**

During the development for the 2007 Permit, EPA facilitated the collection of Traditional Ecological Knowledge from Cook Inlet area tribes, pursuant to Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. The following paragraphs summarize the interview responses.

Numerous Tribal members from multiple villages expressed consistent observations and concerns. In general, these concerns fit into two main categories: (1) the potential for environmental impacts from catastrophic events such as oil spills (especially considering the age of the platforms and associated pipelines) and (2) the effects from routine platform operations that include the discharge of contaminants.

Tribal members frequently noted an overall decline in the population of important food species and in the quality of the species being caught or harvested. These changes include salmon with thinner and less firm meat and smaller halibut with chalky and fibrous meat. In addition, Tribal members noted a disappearance in bull kelp and a decrease in the abundance of clams, cockles, bidarkis, cod, flounder, crab, shrimp, mussels, algae, seals and sea lions. Clams and mussels were observed to have thinner and sometimes transparent shells. Furthermore, Tribal members observed a higher incidence of red tide that has resulted in a decrease in the community's ability to collect traditional food, including shellfish and octopus. Tribal members also observed a decrease in the number of sea ducks, such as mergansers and scoters. A number of Tribal members noted finding lesions, growths and deformities on fish. Some Tribal members noted that noncommercial fish, such as hooligans and stickelbacks, have declined in numbers; thus, indicating that commercial and recreational fishing are not the sole causes for the observed decline in population.

The tidal variations in Cook Inlet create a very high energy environment with strong currents. Tribal members noted that mixing pools near Kalgin Island and the mouth of Kachemak Bay result from the tidal currents and cause settling of detritus in those areas. Despite the strong currents, Tribal members observed that Cook Inlet is a fairly closed marine system. While Cook Inlet water is carried north and south by strong tides, there is no mechanism to move contaminants out of Cook Inlet. Because of those characteristics, a number of Tribal members observed a potential for pollutants to accumulate in Cook Inlet over time. Based on that information, the Tribes suggested that EPA make an effort to learn more about the fate of pollutants discharged from oil and gas operations in Cook Inlet. It is important to note that during the interviews, opposition to oil and gas development was not evident, but rather there was an overall a desire to ensure that oil and gas activities did not affect the health of Cook Inlet natives, traditional foods or the environment. In fact, in numerous interviews, the Tribal members acknowledged that observations made through Traditional Ecological Knowledge could not be directly attributed to oil and gas activities. However, there was a strong sense that the stress from multiple pollution sources, including oil and gas operations affected the health of Cook Inlet natives, traditional foods, and the environment.

The impacts on Tribes include traveling farther to collect food and the inability to obtain a sufficient quantity of traditional food. Since a significant portion of a Tribal member's diet consists of seafood from Cook Inlet, there is increasing concern regarding the impact on health from contaminants that may accumulate in seafood and the affect of eating lower quality fish. This fear has led some parents to stop feeding their children traditional foods.

The Tribal members made numerous comments expressing their lack of confidence in the monitoring that operators have conducted on oil platforms. They questioned how well the 1999 Permit requirements were actually being enforced. In addition, many Tribal members requested that the public be continuously informed regarding platform reporting and compliance.

EPA agreed that additional information should be gathered regarding the fate of oil and gas discharges and, where appropriate, new limitations and monitoring requirements should be added to the permit to ensure the discharges are properly controlled. To meet these objectives, the 2007 Permit imposed the following requirements and retained by the Draft Permit:

1. The 2007 Permit established new limits on the amount of treatment chemicals added and toxicity triggers, for discharges such as cooling water.
2. The 2007 Permit required continuing study to gain a better understanding of the potential impacts of the discharges. Specifically, the 2007 Permit required operators of all new facilities installed during the five-year term to conduct baseline monitoring.

In addition, EPA acknowledges that a comprehensive compliance program is a critical component of an effective permit. EPA will continue to fairly employ the four principles of compliance assurance (*i.e.*, compliance assurance, compliance incentives, compliance monitoring, and enforcement) for the Draft Permit.

## **V. Other Legal Requirements**

### **A. Standard Permit Provisions**

Permit Parts IV., V., and VI. contain standard regulatory language that must be included in all NPDES permits. Because that language is a recitation of existing regulations, it is not open for comment and cannot be challenged in the context of this permitting action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

### **B. Endangered Species Act (ESA)**

Section 7 of the ESA requires Federal agencies to consult with National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their

actions have the potential to either beneficially or adversely affect any threatened or endangered species. To meet its obligations under the ESA, EPA is preparing a Biological Evaluation (BE) to assist in consultation with NMFS and USFWS. EPA will send the BE to NMFS and USFWS and request concurrence with its determination of effect. This Fact Sheet and the Draft Permit will also be submitted to NMFS and USFWS for review with the BE.

**C. Essential Fish Habitat (EFH)**

The Magnuson-Stevens Fishery Conservation and Management Act requires EPA to consult with NMFS when a proposed discharge has the potential to adversely affect EFH. Based on information on EFH presented in the BE, EPA has determined that the discharge will not adversely affect EFH.

**D. Permit Expiration.** CWA § 402(b)(1)(B) requires that NPDES permits not be issued for a period of time that exceeds five years. Therefore, the Draft Permit will expire five years from the effective date.

**E. Oil Spill Requirements.** CWA § 311 prohibits the discharge of oil and hazardous materials in harmful quantities. Routine discharges specifically controlled by the Draft Permit are excluded from the provisions of CWA § 311. However, the Draft Permit does not preclude the institution of legal action, or relieve permittees from any responsibilities, liabilities, or penalties for other unauthorized discharges of oil and hazardous materials, which are covered by CWA § 311.

**F. Maritime Protection, Research, and Sanctuaries Act (MPRSA)**

No marine sanctuaries, as designated by the MPRSA, exist in the vicinity of the Draft Permit coverage area.

**G. Annex V of MARPOL (73/78 and 33 CFR 151.73).** Under Annex V of MARPOL, the U.S. Coast Guard (USCG) has issued final regulations under 33 CFR § 151.73 to control the disposal of garbage and domestic wastes from fixed or floating platforms. These regulations include those platforms involved in the exploration and exploitation of oil and gas resources, such as oil drilling rigs and production platforms. These regulations also apply to all oil platforms when these platforms are located in navigable waters of the U.S. or within the 200 mile Exclusive Economic Zone. The Draft Permit prohibits the discharge of garbage (as defined at 33 CFR Part 151) within 12 miles of the nearest land. The term garbage, as it is applied here, includes operational and maintenance wastes. Beyond 12 miles, the discharge of food wastes that are ground so as to pass through a 25 millimeter mesh screen, incinerator ash, and non-plastic clinkers will be permitted.

**H. Executive Order 12291.** The Office of Management and Budget (OMB) exempts this action from the review requirements of Executive Order 12291 pursuant to Section 8(b) of that Order. Guidance on Executive Order 12866 contains the same exemptions on OMB review as existed under Executive Order 12291. EPA, however, has prepared a regulatory impact analysis in connection with its

promulgation of guidelines on which a number of the Draft Permit's provisions are based and has submitted it to OMB for review (See 58 FR 12494).

- I. **Paperwork Reduction Act.** EPA has reviewed the requirements imposed on regulated facilities in the Draft Permit under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* OMB has already approved most of the Draft Permit's information collection requirements in submissions made for the NPDES permit program under the provisions of the CWA. This information has been assigned OMB control number: No. 2040-0086 for NPDES permit applications and No. 2040-0004 for the discharge monitoring report form.
  
- J. **Regulatory Flexibility Act.** After review of the facts presented in the notice of intent printed above, EPA certifies, pursuant to the provisions of 5 USC § 605(b), that this Draft Permit will not have a significant impact on a substantial number of small entities. This certification is based on the fact that the regulated parties have greater than 500 employees and are not classified as small businesses under the Small Business Administration regulations established at 49 FR 5023 *et seq.* (February 9, 1984). These facilities are classified as Major Group 13-Oil and Gas Extraction SIC 1311 Crude Petroleum and Natural Gas.

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