



FACT SHEET

PUBLIC COMMENT ISSUANCE DATE: AUGUST 15, 2014
PUBLIC COMMENT EXPIRATION DATE: SEPTEMBER 15, 2014

TECHNICAL CONTACT:

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The U.S. Environmental Protection Agency (EPA) re-proposes the National Pollutant Discharge Elimination System (NPDES) general permit for the following activities pursuant to the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*:

OIL AND GAS GEOTECHNICAL SURVEYS AND RELATED ACTIVITIES IN FEDERAL WATERS OF THE BEAUFORT AND CHUKCHI SEAS (AKG-28-4300)

EPA RE-PROPOSES NPDES GENERAL PERMIT ISSUANCE

On November 22, 2013, EPA released a draft NPDES general permit for oil and gas geotechnical surveys and related activities in federal waters of the Beaufort and Chukchi Seas for public review (Geotechnical General Permit; No. AKG-28-4300). The public comment period closed on February 19, 2014. Based on the comments received, EPA has made the following revisions to the draft Geotechnical General Permit and re-proposes a revised draft for public review. EPA seeks public comment only on the following proposed changes:

- Inclusion of a seasonal prohibition on wastewater discharges to the 3-25 mile lease deferral area in the Chukchi Sea;
- Clarification of Environmental Monitoring Program (EMP) requirements and inclusion of language regarding pre-existing representative baseline data;
- Clarification of Drilling Fluids and Drill Cuttings (Discharge 001) testing requirements;
- Revision of sampling frequencies for fecal coliform and total residual chlorine (Sanitary Wastewater, Discharge 003); and
- Clarification of Notice of Intent (NOI) submission requirements.

This Fact Sheet includes:

- Information on public comment and appeal procedures,
- A description of the re-proposed permit provisions,
- A map of areas where the seasonal prohibitions apply, and
- Technical information supporting the re-proposed provisions.

EPA INVITES COMMENTS ON THE RE-PROPOSAL

EPA will consider all comments specific to the re-proposed Geotechnical General Permit, Fact Sheet and revised ODCE before issuing the final NPDES general permit. Those who wish to comment on the re-proposed permit may do so in writing by **September 15, 2014** (31 days from the date of the Federal Register notice). EPA will only consider comments on the re-proposed permit provisions. Comments submitted previously on the initial draft Geotechnical General Permit need not be resubmitted; comments addressing permit provisions or issues beyond the scope of this re-proposal will not be considered.

All comments must include the name, address, phone number, and email address (if available) of the commenter. Each comment should include a concise statement explaining the basis and relevant facts that support the comment. All written comments should be addressed to:

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ATTN: Director, Office of Water and Watersheds
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After the public comment period ends, EPA will review and consider all comments related to the re-proposed provisions. EPA's Director for the Office of Water and Watersheds in Region 10 will make a final decision regarding the issuance of the Geotechnical General Permit based on all comments received during both comment periods. Pursuant to 40 CFR § 23.2, unless the EPA specifies a different time in the Federal Register notice, two weeks after the Federal Register publication date is the "permit issuance date." The Geotechnical General Permit will become effective 30 days after the permit issuance date. In accordance with Section 509(b)(1)(F) of the Clean Water Act, 33 USC § 1369(b)(1), and 40 CFR § 124.19(a), any interested person may appeal the General Permit in the Ninth Circuit Court of Appeals within 120 days from the permit issuance date.

DOCUMENTS ARE AVAILABLE FOR REVIEW

Pursuant to 40 CFR § 124.9, the Administrative Record for the draft and re-proposed Geotechnical General Permit is available upon request by contacting Erin Seyfried at (206) 553-1448 or seyfried.erin@epa.gov.

The draft and re-proposed Geotechnical General Permit, Fact Sheet and revised ODCE are available for review by contacting the EPA’s Regional Office in Seattle or the EPA Region 10 Alaska Operations Office in Anchorage (see addresses below) between 8:30 a.m. and 4:00 p.m., Monday through Friday. The documents and other information can also be found by visiting the Region 10 website at “www.epa.gov/R10earth/waterpermits.htm”.

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I. DESCRIPTION OF EPA’S RE-PROPOSAL

A. BACKGROUND

On November 22, 2013, EPA issued a draft Geotechnical General Permit for public review, and established a comment deadline of January 27, 2014 (78 FR 70042). In response to requests for an extension of the deadline from the Alaska Eskimo Whaling Commission and the Inupiat Community of the Arctic Slope, EPA extended the comment period for an additional 23 days, from January 27, 2014 to February 19, 2014 (79 FR 4344).

Based on the comments received during the public review of the draft Geotechnical General Permit, EPA determined that certain permit provisions warranted further consideration and notified interested parties of this determination on March 21, 2014. To further that process, EPA met with several commenters to clarify certain technical issues and obtain additional information.

The public comments and subsequent information resulted in EPA revising several permit provisions, as described in further detail below.

B. PERMIT CHANGES SUBJECT TO THE RE-PROPOSAL

The following sections describe the changes made to the draft Geotechnical General Permit that are subject to the re-proposal.

1. CHUKCHI SEA SPRING LEAD SYSTEM SEASONAL PROHIBITION

EPA received many comments on the importance of the spring lead system in the Chukchi Sea for migrating bowhead whales and for other marine mammals such as beluga and humpback whales and bearded seals, as well as certain bird species. Having reviewed those comments, EPA has included a prohibition of all discharges to federal waters of the Chukchi Sea within the area 3 to 25 nautical miles offshore prior to July 1. This prohibition is protective of the spring lead system, described further below, and the species that rely on it during the sensitive spring migration, feeding, and calving period.

The prohibition corresponds with other federal regulatory requirements, including the Bureau of Ocean Energy Management’s (BOEM) decision to defer the 3-25 mile area in the Chukchi Sea from leasing entirely. BOEM’s Environmental Impact Statement (EIS) for the 2007-2012 Five-Year Program concluded that “the deferral would reduce potential impacts to endangered and threatened species, including the bowhead whales and other whales; reduce threats to marine and coastal birds because of their concentration in the deferral area; and reduce visual-resource effects by moving the potential platform locations farther offshore.” The deferral area was developed based on a

Biological Opinion from the National Marine Fisheries Service (NMFS) in 1987, which primarily focused on the importance of the spring lead system for protecting migrating bowhead whales (BOEM 2007).

EPA’s selection of the July 1 date is based on the fact that offshore activities are traditionally conducted during the open water (ice-free) season, which typically begins on or after July 1, and ceases approximately 120 days later (Shell 2014). This date also corresponds with NMFS’ estimate of completion of the spring bowhead migration (NMFS 2011). In keeping with this conclusion, NMFS has applied a restriction in the 2012 Incidental Harassment Authorization to Shell, prohibiting vessel entry into the Chukchi Sea through the Bering Strait prior to July 1 (NMFS 2012).

This seasonal prohibition for the Chukchi Sea spring lead system is shown in FIGURE 1 (“Figure 2” in the Permit), below, and has been added to Permit Part II.A.6. (“Requirements for All Discharges”) and states as follows:

Chukchi Sea Spring Lead System Seasonal Restriction (Permit Part II.A.6.). The permittee is prohibited from discharging any waste stream within the Chukchi Sea lease deferral corridor, which corresponds to the area 3-25 nautical miles offshore, prior to July 1. Figure 2 (below) provides a map of where this seasonal restriction applies.

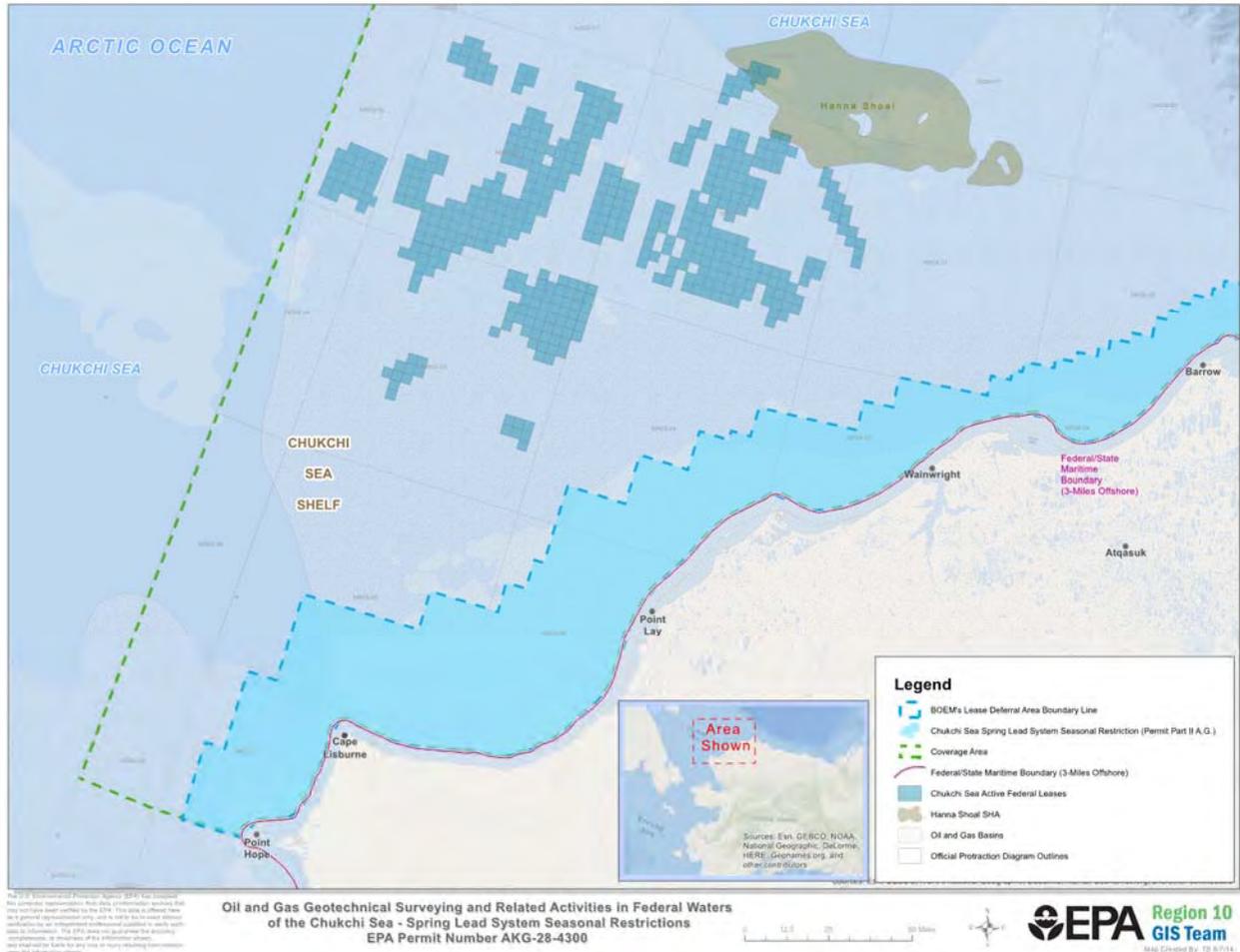


FIGURE 1: Chukchi Sea Spring Lead System Seasonally Restricted Area (see Permit Part II.A.6.)

Spring leads and polynyas (areas of open water in sea ice) serve as large heat sources to the atmosphere, play a key role in ice and brine production, and provide critical habitat for feeding, reproduction and migration to several seal species, polar bears, and migrating bowhead, humpback and beluga whales (Martin 2001). For example, data indicate that most calving by bowhead whales occurs during the spring migration when whales are in the Chukchi Sea spring lead system, although some calving also likely occurs in the Beaufort spring lead system (NMFS 2010). Furthermore, Iñupiat hunters rely on these spring leads and open-water areas for spring whaling of bowheads from April to June (Norton and Graves 2004 as cited in NMFS 2012).

The Ledyard Bay area, located between Cape Lisburne and the village of Point Lay, is part of the spring lead system that appears to be a stopover point for a substantial proportion of seabirds, including threatened species of eiders, moving to breeding areas on the Arctic Coastal Plain or western Canada. Similarly, this same area appears important to many of these same birds once they leave

breeding grounds and molt or stage prior to migrating to wintering areas (MMS 2007). Spectacled eiders and Steller's eiders make use of the spring lead system when they migrate from the wintering area to the Chukchi Sea. The spring lead system includes the Ledyard Bay Critical Habitat Unit and typically has represented the only open-water area along their migratory path (BOEMRE 2011).

In general, sea ice in the Chukchi Sea is newly generated each year (Mahoney 2012). In the Chukchi Sea, there is a net northward flow, which enters through the Bering Strait and branches into different bathymetrically constrained currents (Weingartner et al., 2005 as cited in Mahoney et al. 2012). In the spring, the heat flux associated with this northward flow enhances the early loss of ice in the Chukchi Sea (Woodgate et al. 2010 as cited in Mahoney et al. 2012). These leads form within the pack-ice zone and particularly around the seaward landfast ice edge (MMS 2008). The most prominent coastal polynyas and flaw leads, the openings between pack ice and landfast ice, form along the eastern Chukchi Coast between Point Hope and Point Barrow, as well as to the north and west of Wrangel Island, with less distinct flaw leads appearing off the northern coast of Chukotka (Mahoney et al. 2012). Leads may expose large areas of open water along the shoreline, creating contrast in color and texture between sea ice, land, and sea. These leads separate a region of largely immobile ice in the southeastern Beaufort Sea from the more mobile pack ice in the Chukchi Sea to the west.

The spring leads and polynyas support large concentrations of marine mammals. Polynya regions annually absorb more solar radiation than adjacent regions covered with thick pack ice due to the fact that the polynya regions become ice-free earlier in the year. As a result, the polynya regions have a significantly greater primary productivity than regions with heavy winter pack ice, thus making these areas important for feeding. These regions also provide the only migration pathways for bowhead and other whale species as they migrate from the Bering Strait to the Beaufort Sea and Canadian waters. The following figures (FIGURE 2 and FIGURE 3) represent the general extent of the Chukchi Sea spring lead system based on historical and the most recent year of data collected during four consecutive months of March, April, May and June by Eicken et al. (2006) from the MMS OCS STUDY 2005-068.

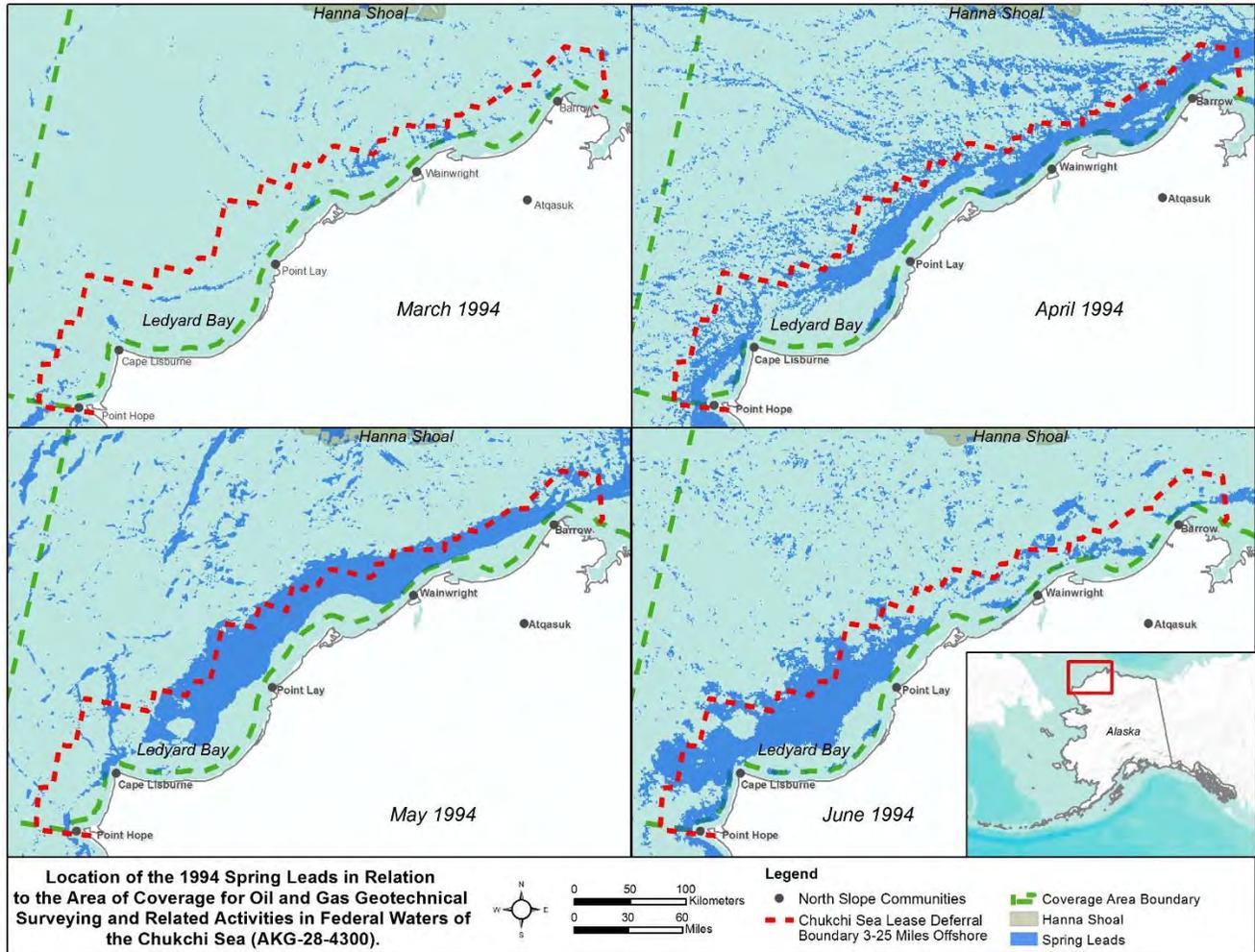


FIGURE 2: Location of the 1994 Chukchi Sea Spring Lead System in Relation to the Area of Coverage for the Geotechnical General Permit (AKG-28-4300).

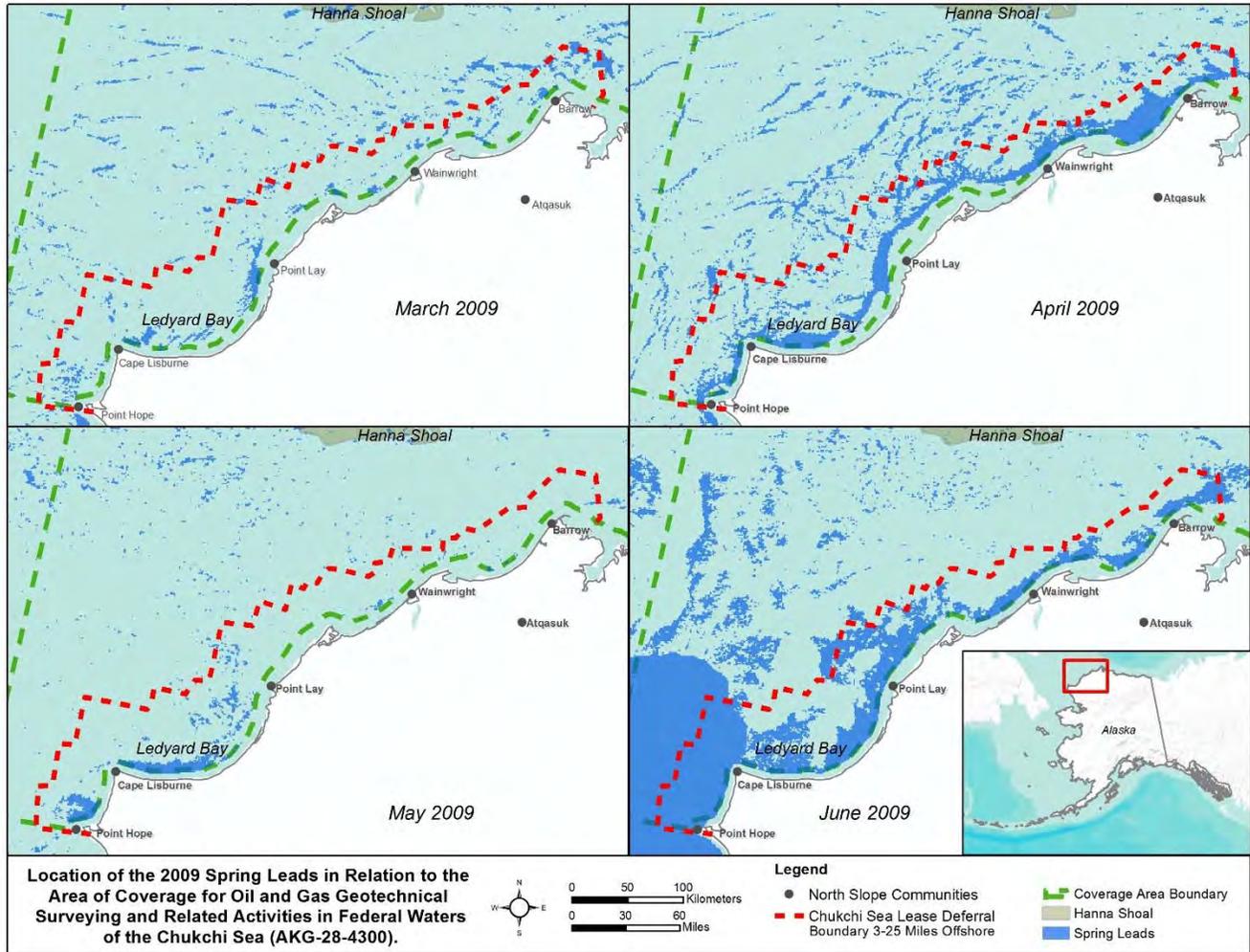


FIGURE 3: Location of the 2009 Chukchi Sea Spring Lead System in Relation to the Area of Coverage for the Geotechnical General Permit (AKG-28-4300).

The spring lead system and spring-migration corridor through the Beaufort Sea extends farther offshore than through the Chukchi Sea (NMFS 2013). Offshore activities, such as geotechnical surveys and related activities, are unlikely to occur within the Beaufort Sea spring lead system during the spring bowhead migration because the pack ice movement at this time of year would be too variable and unsafe for vessels to get to an offshore location to conduct the activities (NMFS 2008).

Due to the relative nearshore location of the spring lead system in the Chukchi Sea, its particular importance for feeding, migration, and calving for a number of species, and to protect the spring subsistence hunting period, EPA has included a seasonal prohibition on all discharges within the 3 – 25 mile offshore prior to July 1. This seasonal prohibition would reduce impacts to this sensitive ecosystem, while simultaneously protecting the migration and calving corridor of bowhead whales.

EPA’s ODCE includes and expanded discussion of the spring lead system, analyses of the discharges, and provides additional rationale for the seasonal prohibition.

2. ENVIRONMENTAL MONITORING PROGRAM

a. **BASELINE SITE CHARACTERIZATION (“PHASE I”)**

The purpose of the EMP baseline characterization requirement (Draft Permit Part II.A.14.) is to ensure that the geotechnical activity site is not located in or near a sensitive biological area, habitat, or historic property. EPA received comments that site characterization information/data is already collected during preliminary baseline surveys or available through prior or ongoing studies in the Chukchi and Beaufort Seas funded by industry and government agencies. The revised language clarifies that this requirement can be met by submitting existing representative baseline survey data, where available.

EPA has revised the requirements as follows.

Initial Site Physical Sea Bottom Survey (Permit Part II.A.14.15.d.1.). Conduct an assessment of the physical sea bottom before initiating discharges authorized by the general permit to ensure the geotechnical activity site is not located in or near a sensitive biological area, habitat, or in the vicinity of historic properties. The survey should provide both a physical and visual characterization of the seafloor. If the proposed initial site is located in or near a sensitive biological area, habitat, or in the vicinity of historic properties, the permittee must report the information to the Director in accordance with Section II.A.14.15.g.1.

To meet this requirement, the permittee may submit existing baseline survey data that are representative of the site location and demonstrate that the geotechnical activity site is not located in or near a sensitive biological area, habitat, or historic properties. The existing, representative baseline data must be submitted with the NOI for consideration.

Physical Characteristics (Permit Part II.A.1415.d.2). Collect physical data to characterize the conditions of the geotechnical activity site and receiving waters. These physical data **must** include surface wind speed and direction, current speed and direction throughout the water column, water temperature, salinity, depth, and turbidity.

To meet this requirement, the permittee may submit existing site baseline survey data, provided the physical data (i.e. wind/current speed and direction, water temperature, salinity, turbidity) is demonstrated to be representative across the geotechnical survey and/or related activity site.

The track changes represent the changes made to the original language in the Draft Geotechnical General Permit.

b. DRILLING FLUIDS AND DRILL CUTTINGS DEPOSITION EVALUATION (“PART II”)

Based on a review of comments received, the Part II Drilling Fluids and Drill Cuttings Deposition Evaluation requirement (Permit Part II.A.1415.ef.) has been revised to require a narrative discussion rather than a map of the areal extent and depth/thickness of the solids deposition. Given the short term nature of the activities at each location (one to ten days) and the relative small area of deposition, EPA believes a narrative discussion would be more descriptive and useful for future decision-making.

Drilling Fluids and Drill Cuttings Deposition Evaluation (Part II; Permit Part II.A.15.e.). Conduct a physical sea bottom survey immediately following cessation of geotechnical activities at the site. The physical sea bottom survey ~~should~~ **must** include a visual characterization of the seafloor **and a narrative discussion of** ~~to assess the geotechnical activity site condition. The survey must map~~ the areal extent and depth/thickness of solids deposition caused by Discharge 001, and **discuss** ~~depict~~ any potential overlap from deposition caused by nearby exploration activities.

EPA retains the requirement to collect observations for potential marine mammal deflection during periods of discharge of non-contact cooling water (Discharge 009), however, it has been moved from Permit Part II.A.1415.e.1. to Part II.B.J. The purpose of this requirement is to collect information

regarding potential deflection as a result of this discharge to inform future decisions. EPA has added a requirement that the permittee must report any observations of potential deflection in the following month's Discharge Monitoring Report (DMR). The requirement to report any potential marine mammal deflection during the following month's DMR would allow the interested public to access that information.

This monitoring requirement at II.B.J. has been revised to read as follows:

~~*Marine Mammal Observations*~~ ~~*Discharge 009 (non-contact cooling water) Plume Observations.*~~ The permittee must observe ~~collect observations~~ for potential marine mammal deflection during periods of non-contact cooling water discharge (Discharge 009). Observations of potential marine mammal deflection must be reported in the following month's Discharge Monitoring Report (DMR).

Since the marine mammal observation requirement has been removed from the EMP, and is now a monitoring requirement specific to non-contact cooling water discharges (Discharge 009; Permit Part II.B.J.), EPA has removed EMP Objective #4 from Permit Part II.A.15.b.4.

The track changes represent the changes made to the original language in the Draft Geotechnical General Permit.

3. REQUIREMENTS FOR WATER-BASED DRILLING FLUIDS AND DRILL CUTTINGS (DISCHARGE 001)

EPA received comments on the monitoring requirements and the frequency of monitoring for water-based drilling fluids and drill cuttings (Discharge 001), and has revised the relevant permit provisions, as described below.

a. METALS ANALYSIS

EPA received comments that the metal parameters listed in Table A are implicated by exploration drilling, not geotechnical boring. Commenters indicated that the only metals of concern for a geotechnical program are chromium, mercury and sulfides found in barite, which are not easily absorbed by the marine life and can be pre-tested for concentrations from the mud the operator purchases for use each season.

EPA has clarified that the metals analysis for drilling fluids and drill cuttings (Discharge 001) is only required if barite is added to the fluid formulation. Barite is the primary source of metals in the drilling fluid formulation. This modification is reasonable and consistent with EPA's goal of collecting data during this permit term to inform future decisions.

Water-Based Drilling Fluids Metals Analysis (Permit Part II.B.3.). The permittee must analyze each drilling fluids formulation system for the metal contaminants of concern if barite is added to the drilling fluid formation (see Table A). This analysis is required once (1) per ~~batch of drilling fluids mixed at the facility~~ drilling fluid formulation, and the analysis may be conducted “pre-season.” If a new ~~mixture of drilling fluids is created, or a new~~ drilling fluid formulation system is used and/or a new “lot” or supply or barite is used during the geotechnical activities program, then an additional metals analysis is required. The permittee may propose an alternative list of metals based on site-specific data. The results of the water-based drilling fluids metals analysis must be submitted to the Director with the annual NOI renewal or within 1 year of completing geotechnical surveys and/or related activities (whichever comes first).

The track changes represent the changes made to the original language in the Draft Geotechnical General Permit.

b. SUSPENDED PARTICULATE PHASE (SPP) TOXICITY TESTING

EPA received a comment seeking clarification of the term “batch.” The commenter explained that most operators will likely mix “batches” with great frequency, thus necessitating that they perform testing multiple times per day while conducting geotechnical activities. If this provision is not removed from the final permit, or modified, the commenter asserted, it would result in daily helicopter travel to and from vessels during geotechnical activities.

While the draft Geotechnical General Permit did include a definition of the term “batch,” it was not EPA’s intent to require multiple samples to be collected each day to meet the SPP toxicity testing requirements.

EPA has revised the SPP toxicity test sampling requirements to specify that operators must conduct testing no less than once (1) per season and it may be performed pre-season. If a new drilling fluid formulation is used during the course of the geotechnical program, then a new SPP toxicity test must be conducted. Because EPA has allowed the test to be conducted pre-season, EPA has removed the reference to inclement weather conditions.

Please refer to Table 1, below, to view specific changes.

c. MERCURY AND CADMIUM IN STOCK BARITE

As discussed in Section 5.b. of this Fact Sheet, it was not EPA’s intent to require testing for mercury and cadmium to occur multiple times per day. EPA has clarified within Table 1 of the Permit that monitoring for mercury and cadmium testing of stock barite must occur once per season if barite is

added to the drilling fluid formulation, with additional testing required if a new lot/supply of barite is used. The initial testing can be completed pre-season.

Please refer to Table 1, below, to view specific changes.

d. pH

As discussed in Section 3.b. of this Fact Sheet with regard to SPP toxicity testing, it was similarly not EPA’s intent to require testing for pH to occur multiple times per day for Discharge 001. EPA has clarified within Table 1 of the Permit that monitoring for pH must occur “once per season,” with additional testing required if a new drilling fluid formulation is to be used to conduct the geotechnical surveys and/or related activities. The initial testing can be completed pre-season.

Please refer to Table 1, below, to view specific changes.

TABLE 1: Effluent Limitations and Monitoring Requirements for Water-Based Drilling Fluids and Drill Cuttings (Discharge 001)

Discharge	Pollutant Parameter	Effluent Limitation		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Measurement Frequency	Sample Type
Water-based fluids and cuttings	SPP toxicity ^{Note 1,9}	Minimum 96-hour LC ₅₀ of 30,000 ppm		Once per batch <u>season</u> ^{Note 1}	Grab ^{Note 2}
	Drilling fluids and cuttings	Discharge allowed ^{Note 3, 9 8}		Daily	Grab
	Free oil	No discharge ^{Note 4, 9 8}		Daily	Grab
	Diesel oil	No discharge ^{Note 5, 9 8}		Daily	Grab
	Mercury	1 mg/kg ^{Note 6}		Once <u>per season</u> ^{Note 6, 7 5}	Grab
	Cadmium	3 mg/kg ^{Note 6}		Once <u>per season</u> ^{Note 6, 7 5}	Grab
	pH	Report (s.u.)		Once per <u>season</u>	Grab
	Total Volume	See Section II.A.15. (gal)		Daily	Estimate ^{Note 8 7}
Non-aqueous fluids	--	No discharge		--	--
Non-aqueous cuttings	--	No discharge		--	--

FOOTNOTES:

- 1 As determined by the 96-hour suspended particulate phase (SPP) toxicity test in accordance with Appendix 2 to Subpart A of 40 CFR Part 435, Drilling Fluids Toxicity Test. The discharge of water-based drilling fluids or drill cuttings generated using drilling fluids with a daily minimum or monthly average minimum 96-hour LC₅₀ of less than 30,000 ppm is prohibited. The permittee may conduct this test pre-season and must conduct this test no less than once per season. If a new drilling fluid formulation is to be used during the course of the geotechnical program, then a new SPP toxicity test must be conducted. ~~If inclement weather conditions affect timely deliveries of samples, the permittee must notify EPA within 24 hours and document the conditions and rationale in the following monthly DMR.~~
- 2 The permittee must analyze a representative initial sample of drilling fluids either during pre-season preparations or from the mud pit prior to commencing geotechnical drilling operations.
- 3 No discharge allowed upon failure of the static sheen test as determined in accordance with Appendix 1 to Subpart A of 40 CFR Part 435, Static Sheen Test.
- 4 The permittee must analyze a representative initial sample of drilling fluids from the mud pit prior to commencing geotechnical drilling operations using the static sheen test in accordance with Appendix 1 to Subpart A of 40 CFR Part 435, Static Sheen Test.
- 5 The discharge of drilling fluids or drill cuttings generated using drilling fluids which contain diesel oil is prohibited. Compliance will be demonstrated by gas chromatograph (GC) analysis of ~~drilling fluid collected from the drilling fluid used at the greatest borehole depth and~~ of any drilling fluids or cuttings which fail the static sheen test compared to GC analysis of diesel oil in storage on the facility. Whenever drilling fluids fail the static sheen test, the permittee is required to analyze an undiluted sample of the material which failed the test to determine the presence or absence of diesel oil in accordance with EPA SW846 Method 8015C (2007). Gas chromatography/mass spectrometry (GC/MS) may be used if an instance should arise where the permittee and the Director determines that greater resolution of the drilling fluid “fingerprint” is needed for a particular drilling fluid sample.
- 6 Required if barite is added to the drilling fluid formulation. Dry weight in the stock barite. Results must be expressed as mg/kg (dry weight) of barite.
- 7 Required if barite is added to the drilling fluid formulation. The permittee must analyze a representative initial sample of stock barite either during pre-season preparations or prior to drilling at the first geotechnical borehole location of the calendar year and submit the results with the DMR for the month in which operations commence. If any analytical result exceeds the mercury or cadmium effluent limitations in Table 1, the permittee must report the results to the Director in accordance with Section III.G., including the twenty-four hour notice of noncompliance requirement, of this general permit. If the permittee uses the same supply of stock barite to replenish the mud pit during the season’s operations, the permittee may submit the same analysis if no new supplies of barite have been received since the prior analysis. In this case, the DMR should state that no new barite was received since the last reported analysis.
- 8 Record separate total daily volumes of drilling fluids and drill cuttings and report the separate daily volumes in the End of Year Report. Report combined total volume of drilling fluids and drill cuttings discharged on a calendar day in the DMR.
- 9 The permittee must report the following discharge occurrences of noncompliance to the Director in accordance with Section III.G.1., including the twenty-four hour notice of noncompliance requirement, of this general permit: (a) exceedance of the SPP toxicity limitation; (b) failure of the static sheen test; or (c) presence of diesel oil.

4. FECAL COLIFORM AND TOTAL RESIDUAL CHLORINE TESTING

EPA has reduced the sampling frequency for fecal coliform and total residual chlorine from weekly to monthly. EPA had received comments requesting that the fecal coliform requirements be removed from the Draft Geotechnical General Permit. In light of concerns over discharges of human waste to areas of subsistence use and to ensure no unreasonable degradation of the marine environment, EPA will retain requirements for fecal coliform and total residual chlorine testing, which are consistent with discharge regulations found at 40 CFR 140.3 (CWA 312).

Geotechnical surveys and related activities require a much smaller vessel with a limited number of personnel, as compared to other offshore oil and gas activities. Additionally, geotechnical activities are short term at any one site (one to ten days). As such, monthly monitoring is appropriate to ensure protection of the marine environment.

Effluent Parameter	Units	Effluent Limitations		Monitoring Requirements	
		Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Flow	mgd	---	---	Daily	Measured/ recorded
BOD ₅	mg/l	30	60	Weekly	Grab or composite ^{Note 1}
TSS	mg/l	30	60	Weekly	Grab or composite ^{Note 1}
Floating Solids & Garbage		no discharge		Daily	Visual ^{Note 2}
Foam		no discharge		Daily	Visual ^{Note 2}
Oily Sheen		no discharge		Daily	Visual ^{Note 2}
pH	s.u.	6.5 – 8.5		Weekly	Grab
Fecal Coliform Bacteria ^{Note 4}	colonies/ 100 mL	100 ^{Note 3}	200	Weekly <u>Monthly</u>	Grab
Total Residual Chlorine ^{Note 5}	mg/l	---	1.0	Weekly <u>Monthly</u>	Grab

FOOTNOTES:

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

- 2 The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observations on the surface of the receiving water are possible in the vicinity of the discharge. The observations and time of day must be recorded. The numbers of days floating solids, garbage, foam or oily sheen are observed must be recorded and reported in the DMR.
- 3 Must be reported as the geometric mean.
- 4 If inclement weather conditions affect timely deliveries of samples, the permittee must notify EPA within 24 hours document the conditions and rationale in the following monthly DMR.
- 5 Must be maintained as close to this concentration as possible. Sample must be collected immediately after chlorination and prior to any commingling of the waste streams. The analytical detection limit for this parameter is 0.1 mg/l. Residual chlorine may be monitored according to test procedures approved under 40 CFR Part 136 or using a Hach Test Kit capable of measuring free chlorine in the range of 0-3.5 mg/l with a sensitivity of 0.1 mg/l or better. Monitoring is not required if chlorine is not used as a disinfectant or for facilities serving fewer than 10 persons.

5. NOI SUBMISSION REQUIREMENTS

EPA is proposing that the Drilling Fluids Plan (DFP), the Best Management Practice Plan (BMP) and the Quality Assurance Project Plan (QAPP) are only required to be submitted as part of the NOI package if a permittee requests authorization to discharge Drilling Fluids and Drill Cuttings (Discharge 001). The requirement these submittals be included with the NOI package applies only to operators using drilling fluids with added chemicals.

For those operators who intend to only use seawater (without additives) to conduct geotechnical surveys and related activities, or those that intend to conduct on-ice activities and discharge only a single waste stream, such as drill cuttings not associated with drilling fluids (Discharge 011), the DFP, BMP and QAPP do not need to be included with the NOI package. This change minimizes the upfront paperwork submissions and documentation.

A BMP and QAPP must be developed by all permittees and are required to be kept on site.

Please refer to the attached re-proposed NOI form to review the revised list of required submissions. Permittees who will discharge drilling fluids and drill cuttings (Discharge 001) are still subject to the full list of required submissions.

II. OTHER LEGAL REQUIREMENTS

A. OCEAN DISCHARGE CRITERIA EVALUATION

Section 403 of the Clean Water Act, 33 USC § 1343, prohibits issuing an NPDES permit for discharges into marine waters located in the territorial seas, the contiguous zones, and the oceans 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 area of coverage of the draft Geotechnical General Permit is within federal waters of the Beaufort and Chukchi Seas. Since the Geotechnical General Permit applies to discharges to federal waters, the geographic scope of the ODCE extends seaward from the outer boundary of the territorial seas. EPA has revised the ODCE to incorporate the changes in the re-proposed draft permit. After the close of this public comment period, EPA will refine the ODCE analyses and conclusions, as necessary, to reflect the agency's final decisions.

B. STATE WATER QUALITY STANDARDS AND CERTIFICATION

The Geotechnical General Permit's area of coverage is only in federal waters, and thus the General Permit is not subject to Section 401 of the CWA.

C. ENDANGERED SPECIES ACT

The Endangered Species Act requires federal agencies to consult with the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) and the U. S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species and/or their designated critical habitat. EPA analyzed the discharges proposed to be authorized by the draft Geotechnical General Permit, and their potential to adversely affect any of the threatened or endangered species or their designated critical habitat areas in the vicinity of the discharges in a Biological Evaluation (BE) dated December 2013. EPA completed a supplemental analysis evaluating the effects of interrelated and interdependent actions on the Pacific walrus on February 11, 2014. On January 31 and March 19, 2014, EPA received letters of concurrences from the USFWS and NMFS, respectively, agreeing with EPA's determinations of effects. On March 13, 2014, in response to EPA's request for a conference on the Pacific walrus, the USFWS confirmed that the proposed permit action would not jeopardize the continued existence of this species.

EPA has reviewed the re-proposed draft permit and determined that the proposed changes would not have an effect on the original conclusions that the discharges may affect, but are not likely to adversely affect listed, proposed, and candidate species or their designated critical habitat areas. This Fact Sheet, the re-proposed draft Geotechnical General Permit, and the revised ODCE will be sent to NMFS and the USFWS for review during the public comment period.

D. MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT

Under the Magnuson-Stevens Fishery Conservation and Management Act, NMFS and various fisheries management councils must identify and protect "essential fish habitat" (EFH) for species managed under the Act. The EFH regulations define an

adverse effect as any impact that reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species fecundity), site-specific, or habitat wide impacts, including individual, cumulative, or synergistic consequences of actions. Agency actions that may adversely affect EFH requires consultation with NMFS.

EPA's EFH assessment is included as Appendix A to the BE. The EFH assessment concluded that the discharges authorized by the Geotechnical General Permit will not adversely affect EFH. Similarly, EPA is concluding that the re-proposed permit changes will not adversely affect EFH.

E. NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act (NHPA) requires federal agencies to ensure that any agency-funded and permitted actions do not adversely affect historic properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. BOEM has conducted archaeological baseline studies of the Outer Continental Shelf (OCS) of the Beaufort and Chukchi Seas to determine where known historic properties may be located. These baseline studies are used to identify archaeologically sensitive areas that may contain significant historic properties.

For geotechnical surveys and related activities authorized under the Geotechnical General Permit, the applicant is required to submit to EPA, along with the NOI, an assessment of whether the activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. The NOI must state which historic properties may be affected by the proposed activities and include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties.

Additionally, prior to conducting the geotechnical activity, the operator must conduct a baseline site characterization or provide relevant existing data to ensure the locations are not in the vicinity of potential historic properties. The operator must notify EPA 7 calendar days from receipt of the physical sea bottom survey data, if the data indicates the proposed geotechnical activity is located in the vicinity of historic properties.

Information from the NOI and/or the baseline site characterization will assist EPA with ensuring the requirements of Section 106 of the NHPA are met.

F. NATIONAL ENVIRONMENTAL POLICY ACT

In accordance with the Clean Water Act (33 U.S.C. 1371) and EPA regulations (40 CFR 122.29(b)(2) and (c)(1); 40 CFR Part 6), issuance of NPDES permits for new sources are considered major Federal actions subject to review under the National

Environmental Policy Act (NEPA). A “new source” means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced: (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Construction of a “new source” commences if the owner or operator of the facility (1) has begun, or caused to begin significant site preparation work as a part of a continuous on-site construction program or (2) has entered into a binding contractual obligation for the purchase of facilities or equipment that are intended to be used in its operations within a reasonable amount of time. See 40 CFR 122.29(b). Significant site preparation work is defined in the Oil and Gas Offshore Subcategory as 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.

New source performance standards have not been promulgated under section 306 of the CWA for discharges associated with oil and gas geotechnical surveying activities. Furthermore, geotechnical surveying activities are not considered significant site preparation work. As explained in the preamble for the final Offshore Subcategory regulations, exploratory wells are not considered “significant site preparation work” because the operations are conducted at a particular site for a short duration, typically lasting only three to six months, and not necessarily followed by development and production activities at the site. Moreover, even when development and production does occur, it may not occur for months or years after exploration. See 58 Fed. Reg. at 12457 (noting that “exploratory wells would not be new sources in any circumstance”). The same is true for geotechnical activities, which are significantly shorter in duration, lesser in scope and produce smaller discharge volumes.

As such, issuance of NPDES permits for geotechnical survey activities, including this re-proposal, are not considered major Federal actions subject to NEPA review and a NEPA evaluation has not been prepared for this permit action.

G. ENVIRONMENTAL JUSTICE (EXECUTIVE ORDER 12898)

The EPA has determined that the discharges authorized by the draft Geotechnical General Permit will not have a disproportionately high and adverse human health or environmental effects on minority or low-income populations living on the North Slope, including coastal communities near the proposed geotechnical activities. In making this determination, EPA considered the potential effects of the discharges on the communities, including subsistence areas, and the marine environment. EPA’s environmental justice evaluation and determinations are discussed in the draft ODCE for the Geotechnical General Permit, and are based, in part, on the Environmental Justice Analysis completed for the 2012 Beaufort & Chukchi Exploration NPDES

General Permits.

Executive Order 12898 entitled “Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations” states in relevant part that “each Federal agency shall make achieving environmental justices part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...” The order also provides that federal agencies are required to implement the order consistent with and to the extent permitted by existing law. In addition, the EPA Region 10 adopted its “North Slope Communications Protocol: Communications Guidelines to Support Meaningful Involvement of the North Slope Communities in EPA Decision-Making” in May 2009. Consistent with the North Slope Communications Protocol, EPA sent early informational letters in May 2013 to all of the coastal entities (City governments, tribal governments, marine mammal commissions, North Slope Borough, Northwest Arctic Borough and the ANCSA Village and Regional Corporations) on the North Slope, as well as the whaling communities of Kivalina, Diomedea, Wales, Savoonga, Gambell, and Kotzebue. EPA held two informational teleconference calls to determine level of interest in this project; those meetings were held on May 14 and May 21, 2013.

During the public comment period for the draft Geotechnical General Permit, EPA held meetings with the North Slope Borough Mayor’s office, the Native Village of Barrow, the Alaska Eskimo Whaling Commission, and the Inupiat Community of the Arctic Slope. In addition, EPA hosted a public hearing in Barrow on January 8 and a teleconference hearing in Anchorage on January 10, 2014. EPA planned for community and tribal consultation meetings in Kaktovik and Wainwright, but was unable to attend in person due to weather conditions. Instead, the agency held a meeting with the community of Wainwright via teleconference on January 7, 2014.

Finally, EPA has notified tribal governments and local communities and stakeholders on the North Slope of the re-proposal and of the opportunity to provide comment on the re-proposed draft permit. EPA has also concluded that the changes included in the re-proposal do not alter the conclusion that the permit action would not have a disproportionately high and adverse human health or environmental effects on minority or low-income populations living on the North Slope, including coastal communities near the proposed geotechnical activities.

H. TRIBAL CONSULTATION (EXECUTIVE ORDER 13175)

Executive Order 13175 (November, 2000) entitled “Consultation and Coordination with Indian Tribal Governments” requires federal agencies to have an accountable process to assure meaningful and timely input by tribal officials in the development of regulatory policies on matters that have tribal implications and to strengthen the government-to-government relationship with Indian tribes. In May, 2011, the EPA issued the “EPA Policy on Consultation and Coordination with Indian Tribes” which

established national guidelines and institutional controls for consultation.

Efforts have been taken to provide tribal entities and North Slope, Northwest Arctic, and Bering Sea communities with information about the ODCE and draft Geotechnical General Permit development process, and to simultaneously seek early input into the EPA evaluations. In May 2013, the EPA held two information sessions via conference call with members of tribal governments, native corporations, and subsistence commissions to inform them about the upcoming NPDES permitting action and seek input.

Pursuant to the EPA Region 10's Tribal Consultation Procedures, in determining which tribal governments to invite for consultation, the EPA considered whether the action could potentially affect a tribe's resources, rights, or traditional way of life. On September 19, 2013, the EPA sent an invitation for tribal consultation to the following tribal governments: Native Village of Kaktovik, Native Village of Nuiqsut, Native Village of Barrow, ICAS, Wainwright Traditional Council, Native Village of Point Lay, Native Village of Point Hope, Native Village of Kivalina, Kotzebue IRA Council, Native Village of Diomedea, Native Village of Wales, Native Village of Savoonga, and the Native Village of Gambell. Included with the invitation for tribal consultation was a summary of the draft Geotechnical General Permit's requirements. During the comment period for the draft Geotechnical General Permit, EPA held tribal consultation meetings with the Native Village of Barrow and the Inupiat Community of the Arctic Slope.

Consistent with the Executive Order and the EPA tribal consultation policies, the EPA will honor requests for consultation meetings on the re-proposed draft Geotechnical General Permit from federally-recognized tribal governments.

I. POLLUTION PREVENTION ACT

It is national policy that, whenever feasible, pollution should be prevented or reduced at the source, that pollution which cannot be prevented should be recycled in an environmentally safe manner, and that disposal or release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner. The permittee will discharge at the facility in accordance with best management practices that will address the provisions of the Pollution Prevention Act.

J. OIL SPILL REQUIREMENTS

Section 311 of the Clean Water Act prohibits the discharge of oil and hazardous substances in harmful quantities. Discharges specifically controlled by the draft Geotechnical General Permit are excluded from the provisions of Section 311 because these discharges are limited to amounts and concentrations which are deemed to be protective of State water quality standards. However, the permit does not preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities,

or penalties for other unauthorized discharges of oil and hazardous materials which are covered by Section 311.

K. REFERENCES

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