



**AUTHORIZATION TO DISCHARGE UNDER THE
ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
FOR
GENERAL PERMIT AKG283100 - GEOTECHNICAL SURVEYS IN STATE
WATERS OF THE BEAUFORT AND CHUKCHI SEAS**

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501**

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations. The following discharges may be authorized by this permit:

DISCHARGE NUMBER	DISCHARGES DISCRIPTION
001	Water-Based Drilling Fluids and Drill Cuttings
002	Deck Drainage
003	Domestic Wastewater (as defined in 18 AAC 72.990(23))
004	Graywater (as defined in 18 AAC 72.990(35))
005	Desalination Unit Wastes
007	Boiler Blowdown
008	Fire Control System Test Water
009	Non-Contact Cooling Water
010	Uncontaminated Ballast Water
011	Bilge Water
012	Excess Cement Slurry

Owners and operators of geotechnical facilities engaged in conducting geotechnical surveys, located in the area from the inner boundary of the territorial seas to three nautical miles seaward of the boundary or baseline of coastal waters beginning generally at Point Hope in the west and extending east to the Canadian boundary, are authorized to discharge wastewater to waters of the United States, only in accordance with effluent limits, monitoring requirements, and other conditions set forth herein.

A COPY OF THIS GENERAL PERMIT

MUST BE KEPT AT THE SITE WHERE DISCHARGES OCCUR.

This permit is effective.

This permit and the authorization to discharge shall expire at midnight on **[INSERT DATE]**.

The permittee shall reapply for a permit reissuance on or before **[INSERT DATE]**, 90 days before the expiration of this permit.

DRAFT

Signature

Wade Strickland

Printed Name

Date

Program Manager

Title

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SCHEDULE OF SUBMISSIONS

The Schedule of Submissions summarizes some of the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (DEC or the Department) during the term of this permit. The permittee is responsible for all submissions and activities even if they are not summarized below.

Table 1: Schedule of Submissions				
Permit Part	Submittal	Frequency	Due Date	Submit Documentation To*
1.1.3.1 and 1.2	Notice of Intent (NOI) to discharge from a new or recommencing geotechnical facility using drilling fluids	Annually	90 days prior to discharge for the first year and 45 days for subsequent years	Permitting – Appendix A, Part 1.1.1.
1.1.3.2 and 1.2	NOI to discharge from a new or recommencing geotechnical facility not using drilling fluids	Annually	45 days prior to discharge for the first year and 45 days for subsequent years	Permitting – Appendix A, Part 1.1.1.
1.1.3 and 1.2.1.7	Plan Review Submitted or Report supporting Request for Waiver from Minimum Treatment requirements	1/permit cycle	90 days prior to discharge, with submittal of NOI (Attachment 1)	Permitting – Appendix A, Part 1.1.1.
1.7	NOI for an existing permittee if the permittee intends to continue operations and discharges beyond the permit term	1/permit cycle	90 days before expiration of the general permit	Permitting – Appendix A, Part 1.1.1.
12.1.2	Best Management Practices (BMP) Plan -	Annually	With the NOI for the first year and a BMP certification 45 days prior to discharge for subsequent years	Permitting – Appendix A, Part 1.1.1.
1.2.1.1	Drilling Fluids Plan (If Applicable)	Annually	90 days prior to discharge for the first year and 45 days for subsequent years	Permitting – Appendix A, Part 1.1.1.
3.1.1	Quality Assurance Project Plan (QAPP)	Annually	45 days prior to discharge or submit with Environmental Monitoring Program (EMP) Study Plan (If Applicable)	Permitting – Appendix A, Part 1.1.1.
3.3 and 3.4	EMP Study Plan (If Applicable)	Annually	With, or prior to, the NOI for the first year and 45 days prior to discharge for subsequent years	Permitting – Appendix A, Part 1.1.1.
1.2.2	Report supporting Request for Waiver from Minimum Treatment requirements	As Necessary	90 days prior to discharge for the first year and 45 days for subsequent years	Permitting – Appendix A, Part 1.1.1.
3.5	Annual Report	Annually	By January 15 th of the year following geotechnical facility operations and all authorized discharges	Compliance – Appendix A, Part 1.1.2.

Table 1: Schedule of Submissions				
Permit Part	Submittal	Frequency	Due Date	Submit Documentation To*
2.9.1 and 2.9.2	Discharge Monitoring Reports (DMRs)		DMR must be postmarked, faxed, e-mailed, or signed electronically by the 15 th day of the following calendar month to DEC at the address in Appendix A, Part 1.1.2.	Compliance – Appendix A, Part 1.1.2.
Appendix A 3.4.1	Oral notification of noncompliance	As Necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance – Appendix A, Part 1.1.2.
Appendix A 3.4.1	Written documentation of noncompliance	As Necessary	Within 5 days after the permittee becomes aware of the circumstances	Compliance – Appendix A, Part 1.1.2.
* See Appendix A Part, 1.1 for addresses				

1.0 PERMIT COVERAGE

1.1 Coverage and Eligibility

- 1.1.1 This general permit (Geotech GP or permit) provides coverage for geotechnical facilities while actively conducting geotechnical surveys in state waters of the of the Beaufort and Chukchi Seas, located in the area from the inner boundary of the territorial seas to three nautical miles seaward of the boundary or baseline of coastal waters between Point Hope at 166°50'20" west longitude and the border with Canada at 141°00'00" west longitude (see Figure 1 - Coverage Area). The permit coverage area is further restricted under Part 1.4.
- 1.1.2 Geotechnical Surveys include drilling operations that use drilling fluids systems or only seawater as a drilling fluid. Geotechnical facilities that use only seawater are not required to obtain authorization for Discharge 001 – Water-based Drilling Fluids and Drill Cuttings but must obtain coverage for the remaining incidental discharges 002 through 005, and 007 through 012 (See Section 1.4.5). In general, geotechnical surveys are defined as collecting marine sediment samples for the purpose of:
 - 1.1.2.1 Evaluating the engineering behavior of subsurface materials;
 - 1.1.2.2 Determining the relevant physical, mechanical and chemical properties of these materials;
 - 1.1.2.3 Assessing risks posed by site conditions, including seafloor or shallow depth geologic hazards;
 - 1.1.2.4 Locating potential archaeological resources and potential hard bottom habitats for avoidance; and
 - 1.1.2.5 Assessing specific locations to inform the placement of platforms, pipelines, or other infrastructure but does not include drilling for the purpose of mud line cellar installations or top hole boring.
 - 1.1.2.6 Gathering information to evaluate engineering issues associated with potential pipeline locations as well as possible exploratory drill site locations. It may also assist in the design of specialized marine soil trenching and/or mudline cellar construction equipment that is suited to Arctic conditions and may minimize impacts associated with construction.
- 1.1.3 New Facilities/Recommencing Facilities: Geotechnical facilities with wastewater discharges within the permit Area of Coverage that meet the criteria for coverage under this permit will be granted coverage upon submittal of a complete NOI in accordance with 18 AAC 83.210(b) and fulfilling other submittal requirements in 1.2.
 - 1.1.3.1 Applicants for geotechnical facilities that use water-based drilling fluids must submit a complete annual NOI to DEC at least 90 days prior to discharge for first year operations and at least 45 days prior to discharge in subsequent years. The annual NOI must detail new geotechnical survey activities plus any previously noticed geotechnical survey activities that were not completed during the previous year and are scheduled for completion during the new NOI period.

- 1.1.3.2 Applicants for geotechnical facilities operating during the open water season that do not use water-based drilling fluids must submit a complete annual NOI to DEC at least 45 days prior to discharge for first year operations and at least 45 days prior to discharge in subsequent years. The annual NOI must detail new geotechnical survey activities plus any previously noticed geotechnical survey activities that were not completed during the previous year and are scheduled for completion during the new NOI period.
- 1.1.4 Applicants may request a mixing zone authorization from DEC by completing the mixing zone section of the NOI.
- 1.1.5 Applicants may request a Zone of Deposit authorization from DEC by completing the Zone of Deposit section of the NOI
- 1.1.6 Authorization to discharge requires written notification from the Department that coverage has been granted, and if requested, that a zone of deposit and/or mixing zone have been authorized. The written general permit authorization will assign a discharge permit number(s), list authorized discharges, and other identifying information.

1.2 NOI Review and Permit Coverage Determination Process

- 1.2.1 Applicants shall submit a complete NOI form (ATTACHMENT 1) for each year of operations along with plans, reports, and (if applicable) a request to waive the minimum treatment requirements associated with 18 AAC 72.050. The following must be attached to the NOI for it to be deemed administratively complete:
 - 1.2.1.1 Drilling Fluids Plan: Applicants seeking a written authorization to discharge water-based drilling fluids and drill cuttings (Discharge 001) are required to develop and implement a Drilling Fluids Plan (Section 2.13) and submit it with the NOI. DEC will review the Drilling Fluids Plan and may provide written comments. If no changes are required for subsequent years of operations, the applicant may submit a certification that the initial Drilling Fluids Plan is unchanged and still in effect.
 - 1.2.1.2 BMP Plan: Applicants seeking a written discharge authorization are required to develop and implement a BMP Plan (Section 2.12) that must be submitted with the first NOI. DEC will review the plan and may provide written comments. For subsequent years of operation, applicants that have previously been authorized to discharge under this permit may submit a certification statement that the BMP plan was reviewed and any necessary revisions to reflect planned operations were made and implemented.
 - 1.2.1.3 Environmental Monitoring Plan (EMP) Study Plan: Applicant seeking written authorization to discharge water-based drilling fluids and drill cuttings (Discharge 001) must submit an EMP Study Plan (Section 3.3) with each NOI for review and approval by the Department. Revisions to the plan will be required until meeting Department approval. If there are no changes to the EMP Study Plan for subsequent years of operation, the permittee may reference the previous EMP Study Plan in their NOI.

- 1.2.1.4 Vicinity Maps: The applicant must demonstrate proposed discharge locations are within the coverage area and outside prohibited areas. A legible area map and a bathymetric chart of the receiving water(s) depicting the location(s) of the geotechnical boreholes extending at least one mile past any borehole must be submitted with the NOI. The vicinity map must identify any Tier 1 or Tier 2 Sensitive Areas (see Table 7) and proposed or existing exploration wells within 3,280 feet (1,000 meters) of any borehole.
 - 1.2.1.5 The applicant must provide the latitude and longitude of all proposed borehole locations in decimal degrees as well as the source (i.e., Google Earth) of the latitude and longitude.
 - 1.2.1.5.1 DEC acknowledges that the coordinates provided are estimates and actual coordinates may not be known until the facility arrives at the proposed location.
 - 1.2.1.6 Line Drawing: Applicants are required to submit a line drawing depicting waste streams from the facility including estimated flow rates and other information necessary to characterize the discharges.
 - 1.2.1.7 Plan Approval and Waivers for First Time Applicants. 18 AAC 72.050 requires the applicant to demonstrate to the Department that a domestic wastewater discharge meets minimum treatment standards prior to discharging to waters of the United States (US). A waiver to minimum treatment may be requested per 18 AAC 72.060 for the discharge of graywater (Discharge 004). (See 1.2.2) Plan approval is also required before constructing, installing, or modifying any part of a domestic wastewater collection, treatment, or disposal system per 18 AAC 72.200. In addition, a permittee that constructs, alters, installs, modifies, or operates a non-domestic wastewater treatment works or disposal system must obtain written approval of engineering plans per 18 AAC 72.600.
- 1.2.2 Applicants requesting a waiver from the minimum treatment requirements for graywater prior to discharge (18 AAC 72.050(a)(4)) must submit a engineers report in accordance with 18 AAC 72.050(d)(1)-(5) and 18 AAC 72.060(b). The report shall be prepared by a registered Alaskan engineer and submitted with the NOI and be accompanied by the appropriate fee required by 18 AAC 72.955(a), Table D (3), as amended January 2010, or any subsequently approved fee regulation adopted by the Department.
 - 1.2.2.1 The Department will review the engineering report submitted with the NOI to determine if minimum treatment requirements of 18 AAC 72.050 should be waived and the permittee is eligible for coverage under this permit.
 - 1.2.3 The Department will review a NOI for completeness and accuracy. If a NOI is found to be technically incomplete, the Department will notify the applicant of the needed changes to the NOI submittal.
 - 1.2.4 The Department will make a determination regarding the appropriateness of granting permit coverage at a proposed discharge location or area of operation based on information received.
 - 1.2.5 Location coordinates provided in the NOI for each proposed discharge location or area of operation will be used to determine if a discharge is prohibited by this Geotech GP or would require application for an individual APDES permit.

- 1.2.6 Applicants must indicate on the NOI if any of the proposed geotechnical survey sites are located within 3,280 feet (1,000 meters) of areas identified in Table 7 as Tier 1 or Tier 2 Sensitive Areas or proposed or existing exploration well sites. See Section 1.2.1.4.
- 1.2.7 The Department will, based on the applicant's submittal, make a determination as to whether a 100 meter radius zone of deposit and/or a 100 meter radius cylindrically shaped regulatory mixing zone is appropriate at the proposed discharge location, as well as specify what water quality parameters for which the criteria may be exceeded within the regulatory mixing zone.
- 1.2.8 If the permittee intends to move 3,280 feet (1,000 meters) or more from an approved discharge location, the permittee will be required to notify the Department in writing within seven (7) days of proposed location changes and provide an updated latitude and longitude of the new location of each proposed borehole and information required in 1.2.6. The permittee must fulfill EMP requirements and demonstrate that new borehole locations meet the permit requirements and conditions of the permit in the annual report(s).
- 1.2.9 Upon completion of the NOI review, the Department will either:
- 1.2.9.1 Prepare and transmit a written coverage determination specifying whether:
 - 1.2.9.1.1 The information required by 18 AAC 72.050(d)(1) – (5) is sufficient to waive minimum treatment requirements required by 18 AAC 72.050.
 - 1.2.9.1.2 A mixing zone is authorized.
 - 1.2.9.1.3 A zone of deposit is authorized.
 - 1.2.9.2 Notify the applicant of required revisions to the NOI submittal; or
 - 1.2.9.3 Deny coverage under the Geotech GP and require an applicant to submit an individual permit application.

1.3 Authorized Wastewater Discharges

- 1.3.1 This permit authorizes and places conditions on wastewater discharges from geotechnical facilities that are located within a specified geographical area, both of which are described in more detail at Section 1.1. The Department must determine if the information submitted by the applicant seeking coverage under this permit, in accordance with Section 1.2, including the report required by 18 AAC 72.050(d)(1)-(5) and 18 AAC 72.060(b) for a waiver from minimum treatment requirements, is sufficient prior to authorization under this permit.
- 1.3.2 This permit authorizes the following discharges from geotechnical facilities:

<u>DISCHARGE NUMBER</u>	<u>DISCHARGES DISCRIPTION</u>
001	Water-Based Drilling Fluids and Drill Cuttings
002	Deck Drainage
003	Domestic Wastewater (as defined in 18 AAC 72.990(23))
004	Graywater (as defined in 18 AAC 72.990(35))
005	Desalination Unit Wastes
007	Boiler Blowdown

008	Fire Control System Test Water
009	Non-Contact Cooling Water
010	Uncontaminated Ballast Water
011	Bilge Water
012	Excess Cement Slurry

1.4 Prohibitions

- 1.4.1 Drilling that targets hydrocarbon reserves including drilling for the purpose of beginning a mudline cellar or top hole installation is prohibited.
- 1.4.2 The discharge of diesel fuel, oil-based or non-aqueous drilling fluids, and mineral oil pills (mineral oil plus additives) is prohibited by the permit.
- 1.4.3 This permit prohibits the discharge of mud pits and cleanup liquids at or near the sea surface. Such materials must be discharges at the seafloor.
- 1.4.4 This permit prohibits the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants that are not part of the normal operation of the facility or any pollutants that are not ordinarily present.
- 1.4.5 This permit does not authorize incidental discharges from geotechnical facilities while they are acting as a vessel (not conducting geotechnical surveys). "Vessel" means every description of watercraft or other artificial contrivance being used as a means of transportation on waters of the US. See definition of geotechnical facility in Appendix C.
- 1.4.6 This permit prohibits the discharge to any receiving water that is listed on the CWA Section 303(d) list as impaired for failure to meet a water quality standard (WQS) and the facility discharges a pollutant that causes or contributes to the impairment.
- 1.4.7 This permit prohibits the discharge of any pollutant that is not expressly authorized in the permit.
- 1.4.8 This permit prohibits discharges to waters less than five-meters deep at mean lower low water (MLLW).
- 1.4.9 This permit prohibits discharges to coastal waters of Alaska.
- 1.4.10 This permit prohibits discharge within 3,280 feet (1,000 m) of river mouths or deltas.
- 1.4.11 This permit prohibits all discharges to stable ice.
- 1.4.12 This permit prohibits the discharge of all wastewater from geotechnical facilities within 1,000 meters of the Boulder Patch in Stefansson Sound or between individual Boulder Patches where the distance between those patches is greater than 6,560 ft (2,000 m) but less than 16,400 ft (5,000 m).
- 1.4.13 This permit prohibits Discharge 001 within 1,000 meters of the following locations for the specified time period at each location:
- 1.4.13.1 ~~Kasegaluk Lagoon — June 1 to July 15~~
 - 1.4.13.2 Cape Lisbourne - Icy Cape Walrus Haulouts - when walrus are present (July, August, and September)

1.4.13.3 Vicinity of Cross Island – Late August to Mid-September.

1.5 Requiring an Individual Permit

- 1.5.1 The Department may require a permittee authorized to discharge under the Geotech GP to apply for and obtain an individual permit, or any interested person may petition the Department to take this action. Per 18 AAC 83.215, the Department may consider the issuance of an individual permit when:
- 1.5.1.1 The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;
 - 1.5.1.2 The permittee is not in compliance with or could not meet the terms and conditions of the Geotech GP;
 - 1.5.1.3 A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - 1.5.1.4 Effluent limit guidelines are subsequently promulgated for the point sources covered by the Geotech GP;
 - 1.5.1.5 A Total Maximum Daily Load and corresponding wasteload allocation have been completed for a water body or a segment of a water body;
 - 1.5.1.6 Circumstances have changed since the time of the request to be covered so that the permittee is no longer appropriately controlled under the Geotech GP, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; or
 - 1.5.1.7 The applicant does not meet the minimum treatment waiver requirements of 18 AAC 72.060.
- 1.5.2 The Department will notify the applicant in writing by certified mail that an individual permit application is required. If an applicant fails to submit an individual permit application by the date required in the notification, coverage under the Geotech GP is automatically terminated at the end of the day specified for application submittal.
- 1.5.3 Any permittee authorized under this permit may request to be excluded from the coverage of the Geotech GP by applying for an individual permit. The permittee shall submit an individual permit application (APDES permit application Form 1 and either Form 2C or Form 2M) with reasons supporting the request to the Department at the address in Appendix A, Part 1.1.1.
- 1.5.4 When an individual permit is issued to a permittee otherwise covered by this permit, the applicability of this permit to the permittee is automatically terminated on the effective date of the individual permit.
- 1.5.5 When an individual permit is denied to a permittee otherwise covered by this permit, the permittee is automatically reinstated under this permit on the date of such denial, unless the permittee cannot meet the conditions of the Geotech GP or otherwise specified by the Department.

- 1.5.6 An applicant excluded from the Geotech GP solely because it already has an individual permit may request that the individual permit be revoked and that it be covered by this permit. Upon revocation of the individual permit, and if the permittee can comply with the terms of the Geotech GP, then this permit shall apply to the permittee.

1.6 Notification Requirements

- 1.6.1 All geotechnical facilities seeking authorization to discharge under this general permit must submit a timely and complete NOI to the Department in accordance with the requirements of this Part. The information required for a complete NOI is included in ATTACHMENT 1 of this permit. Upon receipt and review of the NOI by the Department, a qualified applicant will be issued a written authorization that includes an authorization number for the facility and discharge locations.
- 1.6.2 For geotechnical facilities that discharge water-based drilling fluids and drill cuttings (Discharge 001) notification must be made at least 90 days prior to discharge during first year operations and at least 45 days prior to discharge in subsequent years.
- 1.6.3 For geotechnical facilities that DO NOT discharge water-based drilling fluids and drill cuttings (Discharge 001) notification must be made at least 45 days prior to discharge during first year operations and at least 45 days prior to discharge in subsequent years.
- 1.6.4 The NOI shall be signed by the owner, or other signatory authority, in accordance with Appendix A, Part 1.12 (Signature Requirements), and a copy must be retained on site in accordance with Appendix A, Part 1.11 (Monitoring and Records).
- 1.6.5 A mixing zone and zone of deposit request may be included with the NOI.
- 1.6.5.1 The mixing zone size the Department will authorize is a 100-meter radius cylindrical shape centered over the borehole extending from the seafloor to the sea surface.
- 1.6.5.2 The zone of deposit the Department will issue is an area with a 100-meter radius centered over the borehole, or clusters of boreholes no closer than 16 feet apart.
- 1.6.6 The applicant must submit a NOI to the Department at the address in Appendix A, Part 1.1.1.

1.7 Permit Expiration

This permit will expire at midnight on **[insert date]**. A permittee wishing to continue coverage under a reissued Geotech GP must submit a new NOI at least 90 days prior to the expiration of this permit, as described in Appendix A, Part 1.3.

2.0 LIMITS AND MONITORING REQUIREMENTS

2.1 Requirements for all Discharges

- 2.1.1 During the effective period of this permit, the permittee is authorized to discharge pollutants within the area of coverage set forth in Sections 1.1, in accordance with the limits and conditions set forth herein.

- 2.1.2 This permit authorizes the discharge of only those pollutants resulting from a geotechnical facility processes, waste streams, and operations that have been clearly identified in the NOI.
- 2.1.3 The permittee must collect all effluent samples from the effluent stream of each discharge after the last treatment unit prior to discharge into the receiving waters, except as otherwise required by discharge-specific sections of this permit.
- 2.1.4 The permittee must comply with the effluent limits in this permit at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.
- 2.1.5 Unless specifically addressed in this permit, the permittee shall not discharge free oil, floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind.
- 2.1.6 The permittee must minimize the discharge of surfactants, dispersants, and detergents except as necessary to comply with the safety requirements of the Occupational Health and Safety Administration. This restriction applies to tank cleaning and other operations that do not directly involve the safety of workers. The permittee must report all discharge of surfactants, dispersants, and detergents with the monthly DMR. The discharge of dispersants to marine waters in response to oil or other hazardous waste spills is not authorized by this permit.
- 2.1.7 The permittee is not required to conduct monitoring for the facility when it is not being operated as a geotechnical facility. See Section 1.4.5.
- 2.1.8 The permittee shall not discharge diesel oil, non-aqueous drilling fluids, mineral oil, halogenated phenol compounds, trisodium nitrilotriacetic acid, sodium chromate, or sodium dichromate.
- 2.1.9 If any discharges are comingled, the most stringent effluent limit for each individual discharge shall be applied to the resulting discharge. If the individual discharge is not authorized, the comingled discharge is not authorized. Monitoring for compliance with technology-based effluent limits must be accomplished prior to commingling.
- 2.1.10 If requested, the permittee must provide DEC with a sample of any waste stream in the manner specified by DEC as soon as practicable after the request.
- 2.1.11 The discharge of maintenance waste such as removed paint and materials associated with surface preparation and coating application is prohibited. Such materials must be contained to the maximum extent practicable using vacuum abrasive blasting, covering grated areas with plywood, surrounding the area with canvas tarps, and similar measures to capture as much material as practicable for disposal at an alternate site. Prior to conducting sandblasting or similar maintenance activities, the permittee must develop and implement a BMP Plan for the containment of waste material.
- 2.1.12 The permittee must separate area drains for washdown and rainfall that may be contaminated with oil and grease from those area drains that would not be contaminated so that the waste streams are not comingled. Deck drainage that is contaminated with oil and grease must be processed through an oil-water separator, or other equivalent treatment to remove free oil, prior to discharge.

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

- 2.2.1 The discharge of water-based drilling fluids and drill cuttings is only authorized from geotechnical facilities while conducting geotechnical drilling (See definitions in Appendix C).
- 2.2.2 Permittee must analyze a representative sample of stock barite for mercury and cadmium once prior to drilling the first borehole of the season, and submit the results on the monthly DMR. Applicants may satisfy the initial sampling requirement by submitting the results of supplier certification to the Department with the NOI. If no new supplies of barite have been received since the previous analysis or certification, no analysis for mercury and cadmium is required. In this case, the DMR should state that no new barite was received since the last reported analysis. If different supplies of barite are received during the geotechnical boring season, the permittee must analyze a representative sample of stock barite prior to drilling the first borehole and submit with the next DMR. Analyses for mercury and cadmium must be conducted by absorption spectrophotometry and results expressed as mg/kg (dry weight) of barite.
- 2.2.3 In addition to requirements in Section 2.1, the permittee must comply with the following effluent limitations and monitoring requirements:

Table 2: Effluent Limitations and Monitoring Requirements for Water-Based Drilling Fluids and Drill Cuttings (Discharge 001)

Discharge	Pollutant Parameter	Effluent Limitations		Monitoring Requirements	
		Average Monthly and Maximum Daily Limits		Measurement Frequency	Sample Type
Water-based fluids and cuttings	SPP toxicity ^{1,2}	Minimum 96-hour LC ₅₀ of 30,000 parts per million (ppm)		Drilling fluids plan	Grab
	Free oil	No discharge ^{2,4}		Daily	Grab
	Mercury	1 mg/ kilogram (kg) ^{2,3}		Monthly (See 2.2.5)	Grab
	Cadmium	3 mg/kg ^{2,3}		Monthly (See 2.2.5)	Grab
	Volume (gpd (gallons per day))	Report average and maximum daily and monthly total		Daily	Estimate

Footnotes:

- As determined by the 96-hour suspended particulate phase (SPP) toxicity test. See 40 CFR § 435, Subpart A, Appendix 2.
- All Samples to be collected at the mudpit, or other location, prior to downhole use..
- Dry weight in the stock barite. Analysis shall be conducted using EPA Methods 245.5 or 7471b for mercury and 200.7 for cadmium. The permittee report stock barite once per month and submit the information on the appropriate monthly DMR. See Section 2.2.2).
- As determined by the Static Sheen Test. See 40 CFR § 435, Subpart A, Appendix 1.

- 2.2.4 The permittee must perform the Static Sheen Test on separate samples of drilling fluids as required in 40 CFR Part 435, Subpart A, Appendix 1. Samples must be collected at the mud pit prior to discharges and must be tested in accordance with “Approved Methodology: Laboratory Sheen Tests for the Offshore Subcategory, Oil and Gas Extraction Industry.”

2.2.5 The permittee must analyze each discharged drilling fluids system (Discharge 001) identified in the Drilling Fluids Plan for the following metals: barium, cadmium, chromium, copper, mercury, zinc, and lead. If a permittee uses a drillings fluids system previously evaluated in the Drilling Fluids Plan, subsequent metals analysis in not required until the drilling fluids system’s chemical make-up is modified. If the permittee uses a drilling fluids system not specified in the Drilling Fluids Plan, a sample must be collected prior to first use. Analyses for total recoverable concentrations shall be conducted and reported for each metal utilizing the methods specified in 40 CFR Part 136. The results shall be reported in “mg/kg of whole mud (dry weight)” and the moisture content (percent by weight) of the original drilling mud sample must be included in the Annual Report,

2.3 Effluent Limitations and Monitoring Requirements for Deck Drainage (Discharge 002)

2.3.1 In addition to the restrictions set out in Section 2.1, the permittee must comply with the following effluent limitations and monitoring requirements.

Table 3: Effluent Limitations and Monitoring Requirements for Deck Drainage (Discharge 002)

Parameter	Units	Effluent Limitations	Monitoring Requirements	
			Sample Frequency	Sample Type
Free Oil	---	No Discharge	Daily ²	Observation ²
Flow	gpd	Report	Daily	Estimated
Effluent Toxicity Characterization (ETC) ^{1, 3}	See Section 2.7.1	Monitor	Once per Season Minimum	Grab

Footnotes:

1. Contaminated deck drainage must be processed through an oil-water separator, or other equivalent treatment, to remove free oil prior to discharge. (See Section 2.1.12)
2. When discharging through broken or unstable ice, the Static Sheet Test must be used (see 40 CRF Part 435 Subpart A, Appendix 1) and a grab sample from the mud pit is required. The monitoring frequency is reduced to monthly if the permittee has complied with this requirement for three consecutive months in a calendar year.
3. Samples for that portion of the deck drainage collected from the oil-water separator effluent must be sampled for effluent toxicity characterization. (See Section 2.7)

2.4 Effluent Limitations and Monitoring Requirements for Domestic Wastewater (Discharge 003)

2.4.1 In addition to the restrictions set out in Section 2.1, the permittee must comply with the following effluent limitations and monitoring requirements.

Table 4: Effluent Limitations and Monitoring Requirements for Domestic Wastewater (003)

Effluent Parameter ¹	Effluent Limitations			Monitoring Requirements	
	Minimum Limit	Avg. Monthly Limit	Max. Daily Limit	Sample Frequency	Sample Type
Flow (gpd)	-	Report	-	Daily	Estimated
TRC	1.0 mg/L ¹	-	1.0 mg/L ²	Monthly	Grab
BOD	-	30 mg/l	60 mg/l	Monthly	Grab
TSS	-	30 mg/l	60 mg/l	Monthly	Grab
pH [Standard Units (s.u.)]	6.5		8.5	Monthly	Grab
Floating Solids	No Discharge			Daily	Observation ³

Footnotes:

1. The minimum TRC limit is a surrogate parameter for fecal coliform and Enterococci bacteria. Maintain as close to the minimum limit concentration of 1.0 mg/L as possible and measure immediately after chlorination.
2. The maximum daily limit of 1.0 mg/L is measured after the last treatment unit (e.g., dechlorination) and prior to discharge.
3. 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 observation on the surface of the receiving water is possible in the vicinity of the discharge. For domestic wastewater, observations must follow either the morning or midday meal. Observations must be recorded in daily operating logs and made available upon request by DEC.

2.5 Effluent Limitations and Monitoring Requirements for Graywater (Discharges 004)

2.5.1 In addition to the restrictions set out in Section 2.1, the permittee must comply with the following effluent limitations and monitoring requirements.

Table 5: Effluent Limitations and Monitoring Requirements for Graywater (Discharge 004)

Effluent Characteristic ²	Units	Sample Location	Effluent Limitations	Sampling Frequency ¹	Sample Type
Flow	gpd	Effluent	Report	Daily	Estimated
Floating Solids	Visual	Effluent	Report	Daily	Observation
Foam	Visual	Effluent	Report	Daily	Observation
Garbage	Visual	Effluent	Report	Daily	Observation
Oily Sheen	Visual	Effluent	Report	Daily	Observation
pH	s.u.	Effluent	Report	Monthly	Grab

Footnotes:

1. Samples are required during periods of operation.
2. Graywater Discharge 004 requires a plan review and waiver to minimum treatment (Section 1.2.2). Influent and effluent samples for BOD₅ and TSS may be a condition of the plan and waiver approval by the Department.

2.5.1.1 Flow. The permit includes flow monitoring requirements to measure or estimate the effluent discharge flow for each discharge

2.5.1.2 Floating Solids, Foam, Garbage, and Oily Sheen. The permit prohibits floating solids, foam, garbage, and oily sheen and requires a visual observation of the receiving water surface at a minimum frequency of once per day. Observations must follow either the morning or midday meal. Monitoring of the effluent for floating solids, foam, garbage, and oily sheen is to determine compliance with narrative effluent limits. Observations must be recorded in daily operating logs and made available upon request by DEC.

2.6 Effluent Limitations and Requirements for Miscellaneous Discharges (Discharges 005, and 007 - 012)

2.6.1 In addition to the restrictions set out in Sections 2.1, the discharge of desalination unit wastes (005); boiler blowdown (007); fire control system test water (008); non-contact cooling water (009); uncontaminated ballast water (010); and bilge water (011) must comply with the following effluent limitations and monitoring requirements:

Table 6: Effluent Limitations and Monitoring Requirements for Miscellaneous Discharges (Discharges 005, and 007 - 012)

Parameter	Effluent Limitations		Monitoring Requirements	
	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
Flow (gpd)	Report		Daily	Estimate
Free Oil	No discharge ¹	No discharge ¹	Daily ¹	Observation
Temperature ²	Report		Daily	Grab
Chemical Inventory	See Sections 2.6.3		Monthly – Report Annually	Calculation
ETC ³	See Section 2.7.1		Once per Season Minimum See 2.7	Grab

Footnotes:

- Miscellaneous discharge is limited to those times that a visible sheen observation is possible unless the permittee uses the static sheen method which would require a grab sample. Monitoring shall be performed using the visual sheen method on the surface of the receiving water once per week during periods of slack tide when discharging, or by use of the static sheen method at the Permittee's option. The number of days a sheen is observed must be recorded. Observations must be recorded in daily operating logs and made available upon request by DEC.
- Discharge 009 only.
- Applicable to all discharges to which chemical additives have been added except Excess Cement Slurry (012). The permittee must conduct ETC for all discharges 10,000 gpd or greater that have chemical additives. At a minimum, one ETC per season must be performed for all miscellaneous discharges, except 012, regardless of volume or chemical additions.

2.6.2 Discharge Specific Limitations

2.6.2.1 Uncontaminated Ballast Water (Discharge 010). The permittee shall process all contaminated ballast water through an oil-water separator prior to discharge

2.6.2.2 Bilge Water (Discharge 011). The permittee shall process all bilge water through an oil-water separator prior to discharge.

2.6.3 Chemical Additives

2.6.3.1 In addition to the limitations and monitoring requirements in Section 2.6, the permittee must maintain material safety data sheets and an annual inventory of the quantities and rates of chemicals and biocides that are added to desalination unit waste water (Discharge 005). Each annual inventory must be assembled for the calendar year and submitted to the DEC Compliance and Enforcement Program with the annual report.

2.6.3.2 The concentration of treatment chemicals in discharged seawater or freshwater shall not exceed the most stringent of the following three constraints. Compliance with these limitations shall be calculated based on the amount of treatment chemical added to the volume of water discharged.

- The maximum concentrations and any other conditions specified in the EPA product registration labeling if the chemical is an EPA registered product.
- The maximum manufacturers recommended concentration.
- The maximum concentration of 500 mg/L.

2.7 Effluent Toxicity Characterization Testing Requirements

2.7.1 ETC testing is required for the following discharges anytime the individual discharge is greater than 10,000 gpd and chemical additives are used:

- Discharge 002 (deck drainage),
- Discharge 005 (desalination unit wastes),
- Discharge 007 (boiler blowdown),
- Discharge 008 (fire control system test water),
- Discharge 009 (non-contact cooling water), and
- Discharge 011 (bilge water).

2.7.2 At a minimum, one ETC sample is required per discharge described in Section 2.7.1 per season regardless of the discharge rate or if chemical additives were used if a discharge occurs during the season.

2.7.3 Grab samples of 100% effluent will be tested using a rapid toxicity testing process. Samples will be collected after the last treatment and prior to discharge to the receiving water.

2.7.4 The echinoderm fertilization test, EPA method /600/R-95/136, will be used for rapid toxicity testing. Three echinoderm species will be used in order to meet windows of reproductively appropriate time frames. The species include the sand dollar (*Dendraster excentricus*) and two sea urchins species (*Strongylocentrotus purpuratus* and *Lytechinus anamesus*).

- 2.7.5 The toxicity screening threshold limits established for this requirement are based on the initial toxicity screening test using echinoderm fertilization success. For this testing program, the initial toxicity screening thresholds include three criteria, of which 2 and 3 must both be met to indicate a positive toxicity result as described below:
- 1) Percent fertilization of the control has to be >70% for the test to be validated.
 - 2) A statistically significant difference between the control fertilization test and the 100% effluent and:
 - 3) At least a 20% decline in fertilization compared to the corrected- control response.
- 2.7.6 Screening level toxicity testing results will be reported on the DMR for the month following the sample collection and analysis. If testing results show positive toxicity, the permittee must discuss possible causes and steps taken to minimize or eliminate the likelihood of a repeat occurrence on the DMR. Permittees with positive toxicity results are required to verbally notify the DEC Oil and Gas Section Manager (907-269-4874) within 24 hours of lab results.
- 2.7.7 ETC testing shall be accomplished in accordance with the monitoring requirements in Sections 2.7 and 2.8 of this permit.

2.8 Monitoring Requirements

- 2.8.1 Test procedures used for sample analysis shall conform to methods cited in 18 AAC 70.020(c), as amended.
- 2.8.2 The permittee shall use current calibrated equipment when taking field measurements and shall use bottles and sampling procedures provided by a laboratory when taking samples for laboratory analysis.
- 2.8.3 Samples and measurements shall be representative of the volume and nature of the monitored discharge.
- 2.8.4 Additional monitoring parameters and increased monitoring frequency may be required by the Department on a case-by-case basis.
- 2.8.5 If the permittee monitors any influent, effluent, or surface water characteristic identified in this permit more frequently than required, the results of such monitoring shall be reported to the Department on the discharge monitoring report required under Section 2.9.1.
- 2.8.6 Daily Records: All flow monitoring results shall be recorded daily. The permittee shall maintain records of all information resulting from any visual inspections, including documentation of visual observation(s) of floating solids, foam, garbage, and oily sheen for the life of the authorization.

2.9 Reporting of Monitoring Requirements

- 2.9.1 Monitoring required in Section 2.0 - 2.6 and 2.8 (Tables 2 – 6) shall be summarized each month on the DEC DMR to be provided with the permittees authorization or a Department-approved equivalent that provides the same information in a similar format.
- 2.9.2 The submitted DMR must be postmarked, faxed, e-mailed, or signed electronically by the 15th day of the following calendar month to DEC at the address in Appendix A, Part 1.1.2.
- 2.9.3 The permittee must sign and certify all DMRs, reports, and other submittals in accordance with signatory requirements in Section 1.12 of Appendix A – Standard Conditions.
- 2.9.4 For all effluent monitoring, with the exception of total residual chlorine, the permittee must use EPA-approved methods under 40 CFR Part 136, adopted by reference at 18 AAC 83.010(f), that can achieve a method detection limit (MDL) less than the effluent limit. For a parameter without an effluent limit in this permit, the permittee must use the most sensitive MDL from an EPA-approved analytical test method necessary for compliance monitoring. The permittee must use an EPA-approved test method for total residual chlorine monitoring, but in this permit, sample concentrations below the MDL of the EPA-approved method used or 0.1 mg/L, whichever is lower, must be reported on the DMR.
- 2.9.5 For purposes of reporting on the DMR for a single sample, if a value is less than the MDL, the permittee must report “less than [numeric value of MDL],” and if a value is less than a minimum level (ML), the permittee must report “less than [numeric value of ML].”
- 2.9.6 For purposes of calculating a monthly average, zero (0) may be assigned for a value less than the MDL, and [numeric value of MDL] may be assigned for a value between the MDL and the ML. If the average value is less than the MDL, the permittee must report “less than [numeric value of MDL],” and if the average value is less than the ML, the permittee must report “less than [numeric value of ML].”

2.10 Mixing Zone

- 2.10.1 In accordance with State regulations at 18 AAC 70.240, as amended through June 23, 2003, a regulatory mixing zone may be authorized as follows:
 - 2.10.1.1 Discharge 001 – Water-Based Drilling Fluids and Drill Cuttings for Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Silver, Thallium, and Zinc,
 - 2.10.1.2 Discharge 003 – Domestic Wastewater for TRC
 - 2.10.1.3 Discharge 004 – Graywater for TRC
- 2.10.2 The Department will review the NOI information and authorize a standard size 100-meter radius cylindrically-shaped regulatory mixing zone for discharges and parameters listed in 2.10.1.
 - 2.10.2.1 The Department will authorize a mixing zone if the proposed discharges listed in the NOI are consistent with permit conditions.

- 2.10.2.2 Within an authorized mixing zone, the Department may authorize exceedences of the water quality criteria of 18 AAC 70.020 for Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, and TRC. All water quality criteria must be met at the boundary of the mixing zone.
- 2.10.3 The written authorization from the Department will specify authorized discharges and the parameters for which water quality criteria may be exceeded within an authorized mixing zone.
- 2.10.4 If the Department determines that a mixing zone is not appropriate to protect and maintain existing uses of the water body outside of an authorized mixing zone, a permittee may submit additional information to supplement the NOI or may submit an individual permit application Form 1, Form 2C, and Form 2M.

2.11 Zone of Deposit

- 2.11.1 In accordance with State regulations at 18 AAC 70.240, as amended through June 23, 2003, a zone of deposit may be authorized for the discharge of water-based drilling fluids and drill cuttings (Discharge 001) as follows.
- 2.11.2 The Department will review the NOI information and authorize a 100-meter radius zone of deposit with the area centered at the borehole for Discharge 001 if the information provided in the NOI are consistent with permit conditions.

2.12 Best Management Practices Plan

The following BMP Plan requirements applies to all permittees.

- 2.12.1 A BMP Plan is required to be submitted with the first NOI. The permittee must develop and implement a BMP Plan which achieves the objectives and the specific requirements listed in Part 2.12.3. Any existing BMP plans may be modified under this section. The BMP Plan shall be ready to implement at least seven days prior to the initiation of discharge. For subsequent years of operation, applicants that have previously been authorized to discharge under this permit may submit a certification statement that the BMP plan was reviewed and any necessary revisions to reflect planned operations were made and implemented
- 2.12.2 Through implementation of the BMP Plan, the permittee must:
- 2.12.2.1 Prevent or minimize the generation and the potential for the release of pollutants from the geotechnical facility to the waters of the US through normal operations and ancillary activities; and
 - 2.12.2.2 Ensure that methods of pollution prevention, control, and treatment will be applied to all wastes and other substances discharged
- 2.12.3 The BMP Plan should be consistent with the general guidance contained in *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004, October 1993) or any subsequent revision. The BMP Plan must include, at a minimum, the following items:

- 2.12.3.1 The number and quantity of pollutants and the toxicity of effluent generated, discharged, or potentially discharged by the facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.
 - 2.12.3.2 Under the BMP Plan and any Standard Operating Procedures included in the BMP Plan, the permittee must ensure proper operation and maintenance of water management and wastewater treatment systems. BMP Plan elements must be developed in accordance with good engineering practices.
 - 2.12.3.3 Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the US due to equipment failure, improper operation, or natural phenomena, such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.
 - 2.12.3.4 Statement of BMP policy. The BMP Plan must include a statement of management commitment to provide the necessary financial, staff, equipment, and training resources to develop and implement the BMP Plan on a continuing basis.
 - 2.12.3.5 Structure, functions, and procedures of the BMP Committee. The BMP Plan must establish a BMP Committee chosen by the permittee responsible for developing, implementing, and maintaining the BMP Plan.
 - 2.12.3.6 A description of potential pollutant sources and their associated discharge numbers.
 - 2.12.3.7 An identification and assessment of risks associated with accidental pollutant releases.
 - 2.12.3.8 Standard Operating Procedures to achieve the above objectives and specific best management practices in Part 2.12.4.
 - 2.12.3.9 Materials compatibility.
 - 2.12.3.10 Good housekeeping.
 - 2.12.3.11 Inspections.
 - 2.12.3.12 Preventative maintenance and repair.
 - 2.12.3.13 Security.
 - 2.12.3.14 Employee training.
 - 2.12.3.15 Record keeping and reporting.
 - 2.12.3.16 Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP Plan are considered as part of the modifications.
 - 2.12.3.17 Final constructed site plans, drawings, and maps.
- 2.12.4 Specific BMPs. The BMP Plan must establish specific BMPs or other measures to ensure that the following objectives or specific requirements are met:

- 2.12.4.1 Reflect requirements under CWA §402(p) and the storm water regulations at 40 CFR §§122.26 and 122.44 and otherwise eliminate, to the extent practicable, contamination of storm water runoff.
- 2.12.4.2 Provide for the use of phosphate free and non-toxic soaps and detergents to be used on-site for all purposes. These soaps and detergents must be free from toxic and bioaccumulative compounds and shall not lead to changes of more than 0.2 pH units in background receiving water pH.
- 2.12.4.3 Provide minimization plans for chlorine, surfactants, dispersants, detergents, other chemical disinfectants, and the other products used at the facility.
- 2.12.4.4 Select chemical cleaning compounds and disinfectants to minimize the addition of nitrogen and phosphorous-based chemical materials to the discharge.
- 2.12.4.5 Apply chemical cleaning compounds and disinfectants in accordance with manufacturer instructions and suggested application rates.
- 2.12.4.6 Eliminate the introduction of kitchen oils and greases to the graywater system. When cleaning pots, dishes, pans, etc., the permittee shall remove as much food and oil residue as is practicable before rinsing. Alternate waste receptacles or holding tanks must be used for these materials.
- 2.12.4.7 Ensure that degreasers are non-toxic.
- 2.12.4.8 Prohibit the discharge or placement of any toxic or hazardous material or related residuals into the graywater system (e.g., laundry units, kitchen sinks, dishwashers, drains, sinks, showers, etc.).
- 2.12.4.9 Prohibit the discharge or placement of unused soaps, detergents, or pharmaceuticals into the graywater system (e.g., laundry units, kitchen sinks, dishwashers, drains, sinks, showers, etc.).
- 2.12.4.10 Provide minimization plans for biocides, scale inhibitors, and corrosion inhibitors, and other potentially toxic chemicals used at the facility.
- 2.12.4.11 When possible, substitute standard drill pipe threading compound (pipe dope) with “toxic metals free” pipe dope.
- 2.12.4.12 Careful application of standard drill pipe dope to minimize contamination of receiving water and drilling fluids.
- 2.12.4.13 When possible, substitute standard drilling fluid additives with less toxic additives.
- 2.12.4.14 Careful handling of drilling fluid materials and treatment chemicals to prevent spills.

2.12.4.15 Use of local containment devices such as liners, dikes and drip pans where chemicals are being unpackaged and where wastes are being stored and transferred.

2.12.5 Annual Certification. The BMP Plan must be reviewed annually by the permittee and the permittee chosen BMP Committee.

2.12.5.1 Certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement must be certified by the dated signatures of each BMP Committee member. The statement must be submitted to DEC with the NOI beginning for the second year of operation under this permit after the initial BMP submittal.

2.12.6 Documentation. The permittee must maintain a copy of the BMP Plan at the facility and make it available to DEC or an authorized representative upon request.

2.12.7 BMP Plan Modification

2.12.7.1 The permittee must amend the BMP Plan whenever there is a change in the facility or in the operation of the facility, which materially increases the generation of pollutants or their release or potential release to waters of the US.

2.12.7.2 The permittee must amend the BMP Plan whenever it is found to be ineffective in achieving the general objective of preventing and minimizing the generation and the potential for the release of pollutants from the facility to waters of the US and/or the specific requirements of Part 2.12.4.

2.12.7.3 Any changes to the BMP Plan must be consistent with the objectives and specific requirements listed in Part 2.12.3. All changes in the BMP Plan must be reported to DEC with the annual certification required under Permit Part 2.12.5.1.

2.13 Drilling Fluids Plan Requirements

2.13.1 The permittee must develop and implement a written procedural plan for the formulation and control of drilling fluid/chemical additive systems for the geotechnical program. The Drilling Fluids Plan must specify the drilling fluid/chemical additive systems to be used, and to be discharged (i.e., Discharges 001). The plan must be implemented during drilling operations and a copy of the plan must be available on-site at the geotechnical facility at all times.

2.13.2 The permittee must submit a copy of the completed Drilling Fluids Plan to the DEC with the NOI for the first year of operation.

2.13.3 At a minimum, the drilling fluids system plan must include the following information:

2.13.3.1 Types of drilling fluids systems proposed for use or discharge, the borehole name, borehole number, GPS location(s) from the NOI, and drilling fluid types as basic plan identification for each geotechnical borehole.

- 2.13.3.2 Specific to each geotechnical program and drilling fluids system, provide a list including commercial product names, descriptions of the products, and the maximum proposed discharge concentrations for each product and chemical additive. Concentrations must be commonly stated in appropriate terms (e.g., lb/bbl, gal/bbl, % (wt), or % v/v (% volume oil per volume drilling fluid)). Each drilling fluid or additive system must be clearly labeled with respect to drilling fluid type (e.g., KCl/polymer drilling fluid, freshwater lignosulfonate drilling fluid). Components of the basic drilling fluid must be listed separately for specialty or contingency chemical additives which may be used.
- 2.13.3.3 Written documentation of the operator's determination of how the discharge of drilling fluids and drill cuttings is expected to comply with the 30,000 ppm SPP toxicity limitation. Operator's determination must be based upon, but not limited to, the following criteria:
- Estimate of worst-case cumulative discharge toxicity based on additive toxicity estimations or commercially calculated discharge toxicity estimations;
 - Off-site SPP test results;
 - Description of how overall toxicity is minimized, where possible.
 - A clearly stated procedure for determining whether or not a chemical additive not originally planned for or included in toxicity estimations may be used and discharged, and
 - An outline of the drilling fluids system planning process which must be consistent with other general permit requirements. Names or titles of personnel responsible for the drilling fluid planning process must be included in the drilling fluid plan.

2.14 Removed Substances

Collected screenings, grit, solids, scum, and other facility residuals, or other pollutants removed in the course of treatment or control of water and wastewaters shall be disposed of in a Department-approved manner and method in accordance with 18 AAC 60, such as to prevent any pollution from such materials from entering waters of the US.

3.0 Special Conditions

3.1 Quality Assurance Project Plan

- 3.1.1 The permittee must develop a quality assurance project plan (QAPP) for all monitoring required by this permit. The QAPP must be submitted to DEC within 45 days prior to discharge. If the applicant proposes to discharge drilling fluids and drill cuttings (Discharge 001), the QAPP must be submitted with the EMP Study Plan per Section 3.3.2
- 3.1.2 The QAPP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the Geotech GP and in explaining data anomalies when they occur.

- 3.1.3 Throughout all sample collection and analysis activities, the permittee must use the EPA-approved quality assurance/quality control and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAPP must be prepared in the format which is specified in these documents.
- 3.1.4 The permittee must amend the QAPP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAPP.
- 3.1.5 Copies of the QAPP must be kept on site and made available to DEC upon request.

3.2 Chemical Inventory

For any discharge (001, 002, 003, 004, 005, 007, 008, 009, 010, and 011) using chemical additives, the permittee must maintain a precise chemical inventory of all constituents added, including all drilling fluid additives used to meet specific drilling requirements.. The inventory must list all constituents added including commercial product names, descriptions of the products, and the maximum discharge concentrations for each product and chemical additive. Concentrations must be commonly stated in appropriate terms (e.g., lb/bbl, gal/bbl, % (wt), or % v/v (% volume oil per volume drilling fluid)). The permittee must maintain these records for a period of five years, and must make these records available to DEC upon request.

3.3 Environmental Monitoring Program

- 3.3.1 EMP Description: The purpose of the EMP is to identify the location(s) of sensitive habitats, verify and validate assumptions, collect data to inform future permitting decisions, and ensure protection of the marine environment. The EMP includes the following three phases:
- Phase I – Pre-Drilling Baseline Seafloor Survey and Sediment Sampling
 - Phase II – During-Drilling Plume Observations and Field Measurements
 - Phase III – Post-Drilling Seafloor Survey and Targeted Sediment Sampling
- 3.3.2 EMP Study Plan
- An applicant seeking authorization to discharge water-based drilling fluids and drill cuttings (Discharge 001) must submit an EMP Study Plan to the DEC with the NOI for review and approval. The EMP Study Plan must include the permittee's EMP design and detailed scope of work per phase that is intended to accomplish the goals (Section 3.4.1) and objectives (Section 3.4.2) of the EMP. The applicant must incorporate any changes to the EMP Study Plan required by DEC. An EMP Study Plan must include the following:
- The EMP goals, objectives and phases discussed in Sections 3.3.3.1 and 3.3.3.2;
 - Each element of the EMP, pursuant to Sections 3.3.3:
 - A statistically valid sampling design;
 - All monitoring and modeling procedures and methods;
 - A QAPP (see Section 3.1.)
 - A detailed discussion of how data will be used to meet, test, and evaluate the EMP objectives; and

- A summary of the results of previous environmental monitoring at or near the borehole location that is relevant to the EMP goals and objectives for subsequent years of operation, if applicable.

3.3.2.1 Implementation and Modification. Modifications to the EMP in subsequent years of operation may be approved, at DEC's discretion, if DEC determines that the modification is appropriate. Modifications to the EMP may include changes in sampling parameters, frequency, locations, or components of the EMP. DEC's decision will be based on information provided in the annual EMP Report (Section 3.4) and EMP Study Plans for subsequent years of operation. If the permittee proposes to modify the EMP Study Plan, they must do so by writing the Department.

3.3.2.2 EMP for Subsequent Years of Operation. The permittee may propose in the EMP Study Plan for subsequent years of operation consideration of data derived from a previous EMP, or other relevant sources of information. The permittee may propose that the data be used as the basis for modifying EMP requirements, if the permittee demonstrates how the use of the data satisfies the goals and objectives of Section 3.3.3.1 and 3.3.3.2.

3.3.2.3 The DEC will review the proposed modification in the annual EMP Report and EMP Study Plan for subsequent years of operation to determine whether proposed modifications meet the goals and objectives at the original EMP. The permittee's proposal must include the following information and evaluations:

- identification of the relevant data from an EMP fully completed by the permittee under this general permit for a previous year of operation that was subject to the terms and conditions of Section 3.4. of this general permit;
- an evaluation demonstrating how the use of existing data from a previous EMP and/or other sources support modification of the EMP and meets the goals and objectives, Sections 3.3.3.1 and 3.3.3.2;
- an evaluation of predictive tools used for physical, chemical and biological components that may be used to determine spatial and temporal variations in the near shore marine environment (e.g., benthic community, seafloor bottom substrate, sediment characteristics, etc.);
- an evaluation and demonstration that the Drilling Fluids Plan that controls the types and volumes of drilling fluid systems, chemical additives, etc., supports the proposed modifications, if appropriate; and
- an evaluation and verification that the assumptions for volumes, transport characteristics, and potential environmental impacts associated with the discharge of water-based drilling fluids and drill cuttings (Discharges 001) used to inform permitting decisions are valid.

3.3.3 EMP Goals and Objectives

For the first year of operation, the permittee must design and implement an EMP that meets the following goals, objectives and other requirements contained in this permit. The permittee may propose an EMP modification in subsequent years of operation per Section 3.3.2.

3.3.3.1 EMP Goals

The goals of the EMP are to:

- evaluate potential impacts from Discharge 001;
- protect the marine environment;
- collect data to inform future permitting decisions; and
- develop correlations and predictive tools for near shore environments.

3.3.3.2 EMP Objectives

The objectives of the EMP include:

- conduct a baseline survey and sediment sampling of all borehole locations to ensure biologically sensitive or unique sites are identified and protected and form a basis of comparison for post drilling conditions;
- develop a robust baseline dataset and predictive tools for Area of Coverage sediment chemistry and biological resources and habitats;
- evaluate plume behavior in the near shore environment for Discharges 001 and 009;
- evaluate the nature and extent of Discharge 001 at representative sites;
- collect post-drilling data to verify assumptions and inform future permit decisions; and
- revise and improve EMP Study Plan requirements for subsequent years of operation.

3.3.4 EMP Elements Per Phase

3.3.4.1 Phase I – Pre-Drilling Baseline Seafloor Survey and Sediment Sampling

The purpose of the Phase I Baseline Characterization is to complete an initial site assessment, including seafloor survey and sediment sampling, to document existing conditions and ensure the geotechnical facility is not located in a sensitive biological area or unique habitat. Phase I Baseline Characterization must be completed prior to conducting geotechnical surveying.

3.3.4.1.1 *Phase I Sediment Sampling*– At all borehole locations, a sediment sample must be collected and analyzed for metals shown in Table A and other parameters the permittee propose in the EMP Study Plan. Analyses for each metal must use appropriate methods specified in 40 CFR 136 and be reported as mg/kg. Sediment data will be used to compare to Phase III sediment data and to develop a dataset that potentially results in generation of predictive tools for use in subsequent years of operation. The permittee may submit existing data, if representative of the site location, with the EMP Study Plan. DEC will review the data and, at the DEC’s discretion, determine whether the data meet the Phase I requirements (See Section 3.3.2.3).

Aluminum	Mercury (total/methyl)
Antimony	Nickel
Arsenic	Selenium

Barium	Silver
Beryllium	Thallium
Cadmium	Tin
Chromium	Titanium
Copper	Zinc
Iron	Lead

3.3.4.1.2 Phase I *Seafloor Survey*. At all borehole location, a seafloor survey must be conducted prior to ensure the drilling site is not located near a sensitive biological area or unique habitat and to establish a baseline to compare to Phase III seafloor surveys. The survey should provide both a biological and visual characterization of the seafloor. If the proposed initial site is located in a sensitive biological area or unique habitat, the permittee must notify DEC.

3.3.4.1.3

3.3.4.2 Phase II – During Drilling Plume Observations and Field Measurements

The purpose of during drilling monitoring is collect information on plume characteristics for the discharge of water-based drilling fluids and drill cuttings (Discharge 001) and non-contact cooling water (Discharge 009). To the maximum extent possible, the permittee must continuously monitor for turbidity in the plume from Discharge 001. To the maximum extent possible, the permittee must continuously monitor for temperature data in the receiving water in the plume from Discharge 009. In addition, the permittee must collect surface wind speed and direction, current speed and direction, water temperature, salinity, and depth.

3.3.4.2.1

3.3.4.2.2

3.3.4.3 Phase III – Post-drilling Seafloor Survey and Targeted Sediment Sampling

The purpose of Post-drilling Seafloor Survey and Targeted Sediment Sampling is to verify assumptions on the nature, extent, and potential environmental impacts of water-based drilling fluids and drill cuttings discharged at the seafloor. All boreholes must be included in the seafloor survey. However, the permittee may develop a statistically valid method to target a subset of boreholes in the EMP Study Plan for Phase III sediment sampling.

3.3.4.3.1 *Seafloor Survey*. The seafloor survey must be conducted as soon as possible after borehole completion and should provide both a biological and visual characterization of the seafloor to assess post-drilling site conditions. The survey should map the areal extent and depth/thickness of solids deposition caused by Discharges 001.

3.3.4.3.2 *Targeted Sediment Sampling*. The Phase III sediment sampling must be conducted as soon as possible after drilling. The pollutant parameter analyzed must include, but are not limited to, the metal contaminants of concern in Table A. The permittee should consider other parameters (e.g. organics, gran size, etc.) that may contribute to the construct of predictive tools. In the event unforeseen circumstances prevent the timely sampling of the targeted borehole, the permittee must select another site as described in the EMP Study Plan and document the change in the annual EMP Report.

3.3.5 EMP Reports.

3.3.5.1 The permittee must submit the EMP report with the annual report. The EMP report must contain a description and analysis of the Phase I baseline characterization, a Phase II field measurements plume observations, and a Phase III analysis of post-drilling conditions. The permittee should include a discussion of findings and how those findings may support a modification to future EMP requirements and subsequent EMP Study Plans. If the DEC requires revisions to any EMP report, the permittee must complete the revisions and submit a revised report to the DEC within 60 days of the date of the request or within the time period identified by the DEC, whichever time period is longer.

3.4 Annual Report.

Permittees that are authorized to discharge drilling fluids and drill cuttings (Discharge 001) are required to submit an annual report to the DEC by January 15th of the year following geotechnical facility activity. The report must be signed and certified in accordance with the Signatory Requirements (See Appendix A -Standard Conditions.) of this general permit. The permittee must include and report the following information for each drilling fluid system in the annual report:

3.4.1 Borehole name and number, general permit number, latitude and longitude collected with a GPS unit with Wide Area Augmentation System capabilities, beginning drill date, total borehole depth, and borehole completion date;

3.4.1.1 The borehole drilling dates, time periods (e.g., daily duration), and separate total daily volumes for drilling fluids and drill cuttings associated with Discharge 001;

a precise chemical inventory of all constituents added downhole, including all drilling fluid additives used to meet specific drilling requirements, required for each Discharge in accordance with Section 3.2.

the total volumes of drilling fluid created and added downhole

3.4.1.2 the Material Safety Data Sheet (MSDS) for each chemical used;

3.4.1.3 the base drilling fluid type and the total volume added downhole;

3.4.1.4 the amount of barite used in the drilling fluid system per borehole; and

3.4.1.5 the maximum concentration of each constituent used in the drilling fluid per fluid system;

- 3.4.1.6 the total volumes of drilling fluid discharged to surface waters during the season;
- 3.4.1.7 the estimated amount of each constituent in the drilling fluid discharged;
- 3.4.1.8 results of all effluent toxicity characterization tests
- 3.4.1.9 total discharge volume of drilling fluid per borehole .

APPENDIX A STANDARD CONDITIONS

Appendix A

Standard Conditions

APPENDIX A

STANDARD CONDITIONS

APDES PERMIT

NONDOMESTIC DISCHARGES

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Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska Department of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, Alaska 99501 Telephone (907) 269-6285 Fax (907) 269-3487 Email: DEC.WQPermit@alaska.gov
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1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska Department of Environmental Conservation Division of Water Compliance and Enforcement Program 555 Cordova Street Anchorage, Alaska 99501 Telephone Nationwide (877) 569-4114 Anchorage Area / International (907) 269-4114 Fax (907) 269-4604 Email: dec-wqreporting@alaska.gov
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1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

1.6.1 A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.

1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

- 1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;
- 1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;
- 1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and
- 1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

- 1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- 1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:
 - 1.11.2.1 All calibration and maintenance records,
 - 1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,
 - 1.11.2.3 All reports required by a permit,
 - 1.11.2.4 Records of all data used to complete the application for a permit,
 - 1.11.2.5 Field logbooks or visual monitoring logbooks,
 - 1.11.2.6 Quality assurance chain of custody forms,
 - 1.11.2.7 Copies of discharge monitoring reports, and
 - 1.11.2.8 A copy of this APDES permit.
- 1.11.3 Records of monitoring information must include:
 - 1.11.3.1 The date, exact place, and time of any sampling or measurement;
 - 1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);
 - 1.11.3.3 The date(s) and time any analysis was performed;
 - 1.11.3.4 The name(s) of any individual(s) who performed any analysis;
 - 1.11.3.5 Any analytical technique or method used; and
 - 1.11.3.6 The results of the analysis.

1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

- 1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2) and (c)(3), and AS 46.03.790(g).
- 1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:
- 1.12.2.1 For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:
- 1.12.2.1.1 A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
- 1.12.2.1.2 The manager of one of more manufacturing, production, or operating facilities, if
- 1.12.2.1.2.1 The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
- 1.12.2.1.2.2 The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
- 1.12.2.1.2.3 Authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively, shall sign the application
- 1.12.2.3 For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means:
- 1.12.2.3.1 The chief executive officer of the agency; or
- 1.12.2.3.2 A senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- 1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- 1.12.3.1 The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

- 1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and
- 1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.
- 1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.
- 1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13 Proprietary or Confidential Information

- 1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words "confidential business information" on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.
- 1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.
- 1.13.3 A permittee's claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee

from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (<http://www.dnr.state.ak.us/parks/oha/>), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

- 2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:
 - 2.1.1.1 The alteration or addition may make the facility a “new source” under one or more of the criteria in 18 AAC 83.990(44); or
 - 2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.
- 2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.
- 2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

- 2.2.1 A permittee shall give seven days’ notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.
- 2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

- 2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.
- 2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

- 2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.
- 2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

- 2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.
- 2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

- 2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- 2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
- 2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

- 2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.
- 2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.
- 2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

- 2.6.3.1 Does not cause an effluent limitation to be exceeded, and
- 2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

- 2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.
- 2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
 - 2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;
 - 2.7.2.2 The permitted facility was at the time being properly operated;
 - 2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and
 - 2.7.2.4 The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.
- 2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

- 2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:
 - 2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - 2.8.1.1.1 One hundred micrograms per liter (100 µg/L);
 - 2.8.1.1.2 Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;
 - 2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or
 - 2.8.1.1.4 The level established by the Department in accordance with 18 AAC 83.445.
 - 2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - 2.8.1.2.1 Five hundred micrograms per liter (500 µg/L);
 - 2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;

- 2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or
- 2.8.1.2.4 The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the EPA discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

- 3.2.1 Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must submit reports monthly postmarked by the 15th day of the following month.
- 3.2.2 The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. All signed and certified legible original DMRs and all other documents and reports must be submitted to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.
- 3.2.3 If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR required by Appendix A, Part 3.2. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

- 3.4.1 A report must be made:
 - 3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and
 - 3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

- 3.4.2 A report must include the following information:
 - 3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;
 - 3.4.2.2 The period of noncompliance, including exact dates and times;
 - 3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and
 - 3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 3.4.3 An event that must be reported within 24 hours includes:
 - 3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).
 - 3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).
 - 3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.
- 3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.
- 3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:
 - 3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance;
 - 3.4.5.2 The written report includes all the information required under Appendix A, Part 3.4.2;
 - 3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;
 - 3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and
 - 3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.
- 3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is:
dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2 (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than \$500 nor more than \$100,000 for the initial violation, nor more than \$10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

- 4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;
- 4.1.2 Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;
- 4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and
- 4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

- 4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.
- 4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

- 4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);
- 4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);
- 4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);
- 4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or
- 4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than \$10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) \$200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).

APPENDIX B **ACRONYMS**

Appendix B

Acronyms

The following acronyms are common terms that may be found in an Alaska Pollutant Discharge Elimination System (APDES) permit.

18 AAC 15	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 15: Administrative Procedures
18 AAC 60	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 60: Solid Waste Management
18 AAC 70	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 70: Water Quality Standards
18 AAC 72	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 72: Wastewater Disposal
18 AAC 83	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 83: Alaska Pollutant Discharge Elimination System

All chapters of Alaska Administrative Code, Title 18 are available at the Alaska Administrative Code database <http://www.legis.state.ak.us/cgi-bin/folioisa.dll/aac>

40 CFR	Code of Federal Regulations Title 40: Protection of Environment
AAC	Alaska Administrative Code
ADNR	Alaska Department of Natural Resources
APDES	Alaska Pollutant Discharge Elimination System
AS	Alaska Statutes
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at http://www.legis.state.ak.us/default.htm
BOD ₅	Biochemical Oxygen Demand, 5-day
BMP	Best Management Practice
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology (currently available)
CFR	Code of Federal Regulations
CWA	Clean Water Act

DEC	Alaska Department of Environmental Conservation
DMR	Discharge Monitoring Report
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ETC	Effluent Toxicity Characterization
FC	Fecal Coliform Bacteria
GP	General Permit
GPD or gpd	Gallons per day
mg/L	Milligrams per Liter
MZ	Mixing Zone
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSB	North Slope Borough
ODCE	Ocean Discharge Criteria Evaluation
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SU	Standard Units
TRC	Total Residual Chlorine
TSS	Total Suspended Solids
U.S.C.	United States Code
USFWS	United States Fish & Wildlife Service

WQS

Water Quality Standards

APPENDIX C **DEFINITIONS**

Appendix C

Definitions

The following are common definitions of terms associated with APDES permits. Not all the terms listed may appear in a permit. Consult the footnote references for a complete list of terms and definitions.

Alaska Pollutant Discharge Elimination System (APDES) ^a	Means the state's program, approved by EPA under 33 U.S.C. 1342(b), for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under 33 U.S.C. 1317, 1328, 1342, and 1345
Average Monthly Limit	Means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
Annual	Means once per calendar year
Average	Means an arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities
Average Monthly Discharge Limitation ^a	Means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured for that month
Ballast water	Means harbor or seawater added or removed to maintain the proper ballast floater level and ship draft and to conduct jack-up rig related sea bed support capability tests (e.g. jack-up rig preload water).
Bbl	Means barrel.
Best Management Practices (BMPs) ^a	Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
Bilge water	Means water which collects in the lower internal parts of the drilling vessel hull

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Biochemical Oxygen Demand (BOD) ^c	Means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20° C
Biocide	Means any chemical agent used for controlling the growth of or destroying nuisance organisms (e.g., bacteria, algae, and fungi)
Boiler Blowdown	Means the discharge of water and minerals drained from boiler drums to minimize solids build-up in the boiler
Borehole	Means 4 to 12 inch diameter holes drilled to assess the subsurface characteristics of the seafloor. Boreholes may be shallow (< 50 feet) or deep (> 50 feet)
Bypass ^a	Means the intentional diversion of waste streams from any portion of a treatment facility
Cement Slurry	Is the cement-bentonite mixture that may be used to plug a geotechnical borehole
Cessation or to Cease	Means to completely stop or discontinue an activity
Chronic Toxic Unit (CTU)	Is a measure of toxicity
Core	Means the undisturbed cylindrical sediment sample recovered from the borehole to the facility for laboratory analysis. Analysis (see also “Soil Boring, or Core Sample”)
Cone Penetration Test (CPT)	Is an in situ method to determine the geotechnical engineering properties of soils and delineating soil stratigraphy (rock layers) See also Electronic Cone Penetrometer
Clean Water Act (CWA) ^a	Means the federal law codified at 33 U.S.C. 1251-1387, also referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972
Coastal Waters	Means any location in or on a water of the United States landward of the inner boundary of the territorial seas.
Color ^b	Means the condition that results in the visual sensations of hue and intensity as measured after turbidity is removed

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Commissioner ^a	Means the commissioner of the Alaska Department of Environmental Conservation or the commissioner's designee
Composite Samples	Composite samples must consist of at least eight equal volume grab samples. 24 hour composite sample means a combination of at least eight discrete samples of equal volume collected at equal time intervals over a 24-hour period at the same location. A "flow proportional composite" sample means a combination of at least eight discrete samples collected at equal time intervals over a 24-hour period with each sample volume proportioned according to the flow volume. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of <i>Standard Methods for the Examination of Water and Wastewater</i> .
Contact Recreation ^b	Means activities in which there is direct and intimate contact with water. Contact recreation includes swimming, diving, and water skiing. Contact recreation does not include wading.
Criterion ^b	Means a set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety. A criterion might be a narrative statement instead of a numerical concentration or limit.
Daily Discharge ^a	Means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with a limitation expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
Deck Drainage	Means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities subject to this general permit
Department ^a	Means the Alaska Department of Environmental Conservation
Desalination Unit Wastes	Means wastewater associated with the process of creating fresh water from seawater
Design Flow ^a	Means the wastewater flow rate that the plant was designed to handle

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

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Diesel Oil	Means the grade of distillate fuel oil, as specified in the American Society for Testing and Materials (ASTM) Standard Specifications for Diesel Fuel Oils D975-91 that is typically used as the continuous phase in conventional oil-based drilling fluids. For the purpose of this general permit, “diesel oil” includes the fuel oil present at the facility
Director ^a	Means the commissioner or the commissioner’s designee assigned to administer the APDES program or a portion of it, unless the context identifies an EPA director
Discharge ^a	When used without qualification, discharge means the discharge of a pollutant
Discharge of a Pollutant ^a	Means any addition of any pollutant or combination of pollutants to waters of the United States from any point source or to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation. Discharge includes any addition of pollutants into waters of the United States from surface runoff that is collected or channeled by humans; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works; discharges through pipes, sewers, or other conveyances leading into privately owned treatment works; and does not include an addition of pollutants by any indirect discharger.
Domestic Wastewater ^c	Means waterborne human wastes or graywater derived from dwellings, commercial buildings, institutions, or similar structures. "Domestic wastewater" includes the contents of individual removable containers used to collect and temporarily store human wastes.
Drill Cuttings	For the purposes of this general permit, means particles generated during drilling into subsurface geologic formations and carried out of the hole with drilling fluids (e.g., seawater with additives) and discharges at the seafloor; Examples of drill cuttings include pieces of rock varying in size from fine silt to gravel
Drilling Fluids System	Means a formulation of circulating fluids (mud) and chemical additions used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure. The classes of drilling fluids are water-based fluid and non-aqueous drilling fluid, and water-based fluids. This also includes the discharge of residual drilling fluids from the mud pit during mud pit clean-up.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Drilling Fluid Additives	Include natural thickeners (i.e.; Attapulgitic clay), a densifier or weighting agent (i.e., Barium Sulfate; Barite) and /or a lubricant (i.e., a polymer gel)
Drilling site	Means the single, specific geographical location where an exploratory facility (e.g., jack-up rig, drill ship, semi-submersible, or arctic mobile rig) is positioned (e.g., anchored, secured bottomfast, built on a gravel island or ice pad, etc.) and conducts its well drilling activity, including the seafloor area impacted by the drilling activity
Effluent ^b	Means the segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment
Effluent Toxicity Characterization	For the purposes of this permit means a test designed to identify effluent discharge samples with positive toxicity results from effluent discharge without positive toxicity results using echinoderm fertilization success.
Electronic Cone Penetrometer	Is an in situ investigation method that involves pushing an electronically instrumented probe into the ground that records force resistance, such as tip pressure, local pressure, and pore water pressure. See also “CPT”
Estimated	Means a way to estimate the discharge volume. Approvable estimations include, but are not limited to, the number of persons per day at the facility, volume of potable water produced per day, lift station run time, etc.
Excluded area	Means an area not authorized as a receiving water under a permit
Fecal Coliform Bacteria (FC) ^b	Bacteria that can ferment lactose at 44.5° + 0.2°C to produce gas in a multiple tube procedure. Fecal coliform bacteria also means all bacteria that produce blue colonies in a membrane filtration procedure within 24 ± 2 hours of incubation at 44.5° + 0.2°C in an M-FC broth.
Fire Control System Test Water	Means the water released during the training of personnel in fire protection and the testing and maintenance of fire protection equipment
Fish ^b	Means any of the group of cold-blooded vertebrates that live in water and have permanent gills for breathing and fins for locomotion

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Free Oil	Any oil contained in a wastestream that when discharged will cause a film or sheen upon or a discoloration of the surface of the receiving water
Garbage	Means all kinds of victual, domestic, and operational waste, excluding fresh fish and part thereof, generated during the normal operation and liable to be disposed of continuously or periodically except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78
GC/MS	Means gas chromatography/mass spectrometry
Geometric Mean	The geometric mean is the N th root of the product of N. All sample results of zero will use a value of 1 for calculation of the geometric mean. Example geometric mean calculation: $\sqrt[4]{12 \times 23 \times 34 \times 990} = 55.$
Geotechnical Survey	For the purpose of this permit means any subsurface investigation that collects sediment samples to assess the structural properties of subsurface soil condition for potential placement of structures such as oil and gas production and drilling platforms, ice islands, gravel islands, anchor structures for floating exploration drilling vessels, ports and harbors, and potentially buried pipeline corridors
Geotechnical Facility	For the purposes of this permit means any floating, moored, or stationary vessel, jack-up or lift barge actively conducting geotechnical surveying in open water. Geotechnical surveys conducted on stable ice are not considered geotechnical facilities.
Geotechnical Drilling	For the purpose of this permit means a geotechnical survey that uses advance drilling technology that uses water-based drilled fluids other than pure seawater.
Grab Sample	Means a single instantaneous sample collected at a particular place and time that represents the composition of wastewater only at that time and place
Graywater ^b	Means wastewater from a laundry, kitchen, sink, shower, bath, or other domestic source that does not contain excrement, urine, or combined storm water
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

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Maximum Daily Discharge Limitation ^a	Means the highest allowable “daily discharge”
Mean ^b	Means the average of values obtained over a specified period and, for fecal coliform analysis, is computed as a geometric mean
Measured	Means the actual volume of wastewater discharged using appropriate mechanical or electronic equipment to provide a totalized reading. Measure does not provide a recorded measurement of instantaneous rates.
Milligrams per Liter (mg/L) ^b	Means the concentration at which one thousandth of a gram (10^{-3} g) is found in a volume of one liter. It is approximately equal to the unit “parts per million (ppm),” formerly of common use.
Mixing Zone ^b	Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water
Month	Means the time period from the 1 st of a calendar month to the last day in the month
Monthly Average	Means the average of daily discharges over a monitoring month calculated as the sum of all daily discharges measured during a monitoring month divided by the number of daily discharges measured during that month
Mudline Cellar	A 20 –by-40 foot area excavated into the seafloor where the blowout preventer is installed at a depth below ice scour of the seafloor.
Mud Pit	Is the unit where drilling fluids (muds) are mixed prior to the use during drilling operations. For the purpose of this general permit, discharges from mud pits (including mud pit clean-up) must occur at the seafloor and are authorized under Discharge 001
North Slope Borough	Means the NSB encompasses the entire northern coast and most of the northeastern coast of Alaska along the Arctic Ocean and contains approximately 89,000 sq. miles of land and 5,900 sq. miles of water. The southern boundary runs in an east - west direction at 68° North latitude, about 105 miles north of the Arctic Circle, which is at latitude 66° 30' North.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

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The NSB extends east to the border with Canada, west to the Chukchi Sea, and north to the Beaufort Sea.

New Facility	Means a facility that has not operated in the area specified in the Notice of intent (NOI) prior to the submission of the NOI.
Non-Contact Cooling Water	Means water used for contact, once-through cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content.
Offshore	Means offshore of the inner boundary of the territorial seas.
Open waters	Means ponds, lakes, streams, rivers, and marine waters not covered by ice.
Permittee	Means a company, organization, association, entity, or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring, and reporting as required by the permit
pH ^g	Means a measure of the hydrogen ion concentration of water or wastewater; expressed as the negative log of the hydrogen ion concentration in mg/L. A pH of 7 is neutral. A pH less than 7 is acidic, and a pH greater than 7 is basic.
Primary Treatment ^c	Means wastewater treatment that: (a) will subsequently discharge wastewater to land or waters that are not waters of the United States and substantially removes all floating and settleable solids; or uses fine screens with 0.04-inch or smaller openings; or (b) will subsequently discharge wastewater to waters of the United States and uses screening, sedimentation, and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the treatment works influent; and disinfection, where appropriate.
Principal Executive Officer ^a	Means the chief executive officer of the agency or a senior executive officer having responsibility for the overall operations of a principal geographic unit of division of the agency
Pollutant ^a	Means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under 42 U.S.C. 2011), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, or agricultural waste discharged into water

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Receiving Water Body	Means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea, and Arctic Ocean, in the territorial limits of the state, and all other bodies of surface water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state. (See “Waters of the U.S.” at 18 AAC 83.990(77))
Recommencing Facilities Report	Those facilities that may have let permit coverage lapse but still meet the coverage requirements of the GP. Report results of analysis.
Residual Chlorine	Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.
Responsible Corporate Officer ^a	Means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or Decision making functions for the corporation The Responsible Corporate Officer can also be the manager of one or more manufacturing, production, or operating facilities if the requirements of 18 AAC 83.385(a)(1)(B)(i)-(iii) are met.
Secondary Recreation ^b	Means activities in which incidental water use can occur. Secondary recreation includes boating, camping, hunting, hiking, wading, and recreational fishing. Secondary contact recreation does not include fish consumption.
Sensitive Biological Areas or Habitats	Means significant or unique biological communities, including areas of high biological productivity, diversity, or vulnerability, as well as important habitat areas for Arctic species
Severe Property Damage ^a	Means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
Sheen ^b	Means an iridescent appearance on the water surface

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

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Shellfish ^b	Means a species of crustacean, mollusk, or other aquatic invertebrate with a shell or shell-like exoskeleton in any stage of its life cycle
Soil Boring (or Core Sample)	Means the cylindrical portion of the subsurface geologic formation (soil and rock layers) that is recovered to the deck of the facility for analysis.
Stable Ice	Means landfast or bottom-fast ice that becomes stationary, or stable, enough to support activities on the ice surface (e.g., winter ice programs).
Static Sheen Test	A test intended to indicate the presence of free oil when drilling fluid, drilled cuttings, deck drainage, well treatment fluids, completion and workover fluids, produced water or sand or excess cement slurry are discharged into offshore waters.
Stock Barite	Means the barite that was used to formulate a drilling fluid
Territorial Seas	Means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the off shore limit of inland waters, and extending off shore a distance of three miles.
Top hole	Means the initial drilling and installation of cemented well casing below the mudline cellar that allows continued drilling or re-entry at a later date
Total Suspended Solids (TSS) ^g	Means a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR Part 136
Twice per year	Means two time periods during the calendar year: October through April and May through September
Upset ^a	Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
Wastewater Treatment	Means any process to which wastewater is subjected in order to remove or alter its objectionable constituents and make it suitable for subsequent use or acceptable for discharge to the environment

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

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Water-base drilling fluids	Drilling fluid that has water as its continuous phase and the suspending medium for solids. The base fluid may be fresh water, seawater, brine, saturated brine, or a formate brine. Seawater by itself is not considered a water-based drilling fluid.
Waters of the United States or Waters of the U.S.	Has the meaning given in 18 AAC 83.990(77)
Water Recreation ^b	See contact recreation or secondary recreation
Water Supply ^b	Means any of the waters of the United States that are designated in 18 AAC 70 to be protected for fresh water or marine water uses. Water supply includes waters used for drinking, culinary, food processing, agricultural, aquacultural, seafood processing, and industrial purposes. Water supply does not necessarily mean that water in a waterbody that is protected as a supply for the uses listed in this paragraph is safe to drink in its natural state.
Week	Means the time period of Sunday through Saturday

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

Attachment 1

Notice of Intent



NOTICE OF INTENT (NOI) / APPLICATION TO DISCHARGE UNDER:

General Permit AKG283100 -

Geotechnical Surveys in State Waters of the Beaufort and Chukchi Seas

Please submit this NOI to:

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Wastewater Discharge Authorization Program

555 Cordova Street

Anchorage, Alaska 99501

Submittal of this document constitutes notice that the party identified in Section 3 intends to be covered by the Alaska Pollutant Discharge Elimination System (APDES) General Permit AKG283100 – Geotechnical Surveys in State Waters of the Beaufort and Chukchi Seas (permit). The permit authorizes discharges into waters of the United States resulting from geotechnical facilities and obligates the applicant to comply with the terms and conditions of the permit. Please provide all information below per each site proposed for geotechnical survey activities. Attach supplemental information sheets as appropriate. The applicant may submit the NOI via email to dec.water.oilandgas@alaska.gov. However, a signed hardcopy must also be sent to the address above.

SECTION 1 – PERMIT INFORMATION

Previous Permit or Authorization No. (if applicable):

Please indicate the coverage requested.

New Authorization: A geotechnical facility wastewater discharge that has not been authorized under this general permit.

Reauthorization: A geotechnical facility wastewater discharge that was previously authorized under this general permit.

SECTION 2 – APPLICANT INFORMATION

Company Name:	Phone:	
Name of Contact Person:	Fax:	
Mailing Address (Street/Location):		
City:	State:	Zip:
Email Address:		

SECTION 3 – GEOTECHNICAL FACILITY INFORMATION

Facility Name:				Phone:			
Name of Contact Person:				Fax:			
Facility Mailing Address (Street/Location):						State: AK	Zip:
Email Address:							
Geotechnical Facility Type: <i>(check applicable type)</i>	<input type="checkbox"/>	Jackup Rig	Approx Start Date:		U.S. Coast Guard No.:		
	<input type="checkbox"/>	Drill Ship					
	<input type="checkbox"/>	Semisubmersible	Approx End Date:		Vessel Length:		
	<input type="checkbox"/>	Liftboat					
	<input type="checkbox"/>	Other (specify):					

SECTION 4 – SUPPORT VESSELS (FOR INFORMATION PURPOSES ONLY)
 (If there are more than 6 support vessels, please use additional sheets).

VESSEL #1	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		
VESSEL #2	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		
VESSEL #3	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		
VESSEL #4	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		
VESSEL #5	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		
VESSEL #6	Vessel Name:						
	Phone Number:			Fax Number:		Email:	
	U.S. Coast Guard No.:				Vessel Length:		

SECTION 5 – RESPONSIBLE PARTY INFORMATION

Owner/Operator or Person responsible for overall management of the project and discharge

First Name:	Last Name:	Phone:
Title:		Signatory Authority*: <input type="checkbox"/> Yes <input type="checkbox"/> No
Mailing Address:		Fax:
City:	State:	Zip:
E-mail Address:		

SECTION 6 – ON-SITE CONTACT/OPERATOR INFORMATION Check if same as Responsible Party

First Name:	Last Name:	Phone:
Title:		Signatory Authority*: <input type="checkbox"/> Yes <input type="checkbox"/> No
Mailing Address:		Fax:
City:	State: Alaska	Zip:
E-mail Address:		

SECTION 7 – BILLING INFORMATION

First Name:	Last Name:	Phone:
Title:		Signatory Authority*: <input type="checkbox"/> Yes <input type="checkbox"/> No
Mailing Address:		Fax:
City:	State: Alaska	Zip:
E-mail Address:		

*If no signatory authority is identified above, please provide the appropriate contact and title in an attached cover letter.

SECTION 8 – BOREHOLE LOCATION INFORMATION (DISCHARGE 001)

(Use additional sheets as necessary)

Name of Receiving Waterbody or Area:

Geotechnical Facilities are required to designate the sites where they will be operating. Authorizations will be issued per borehole location. Provide vicinity and borehole maps depicting proposed discharge locations that clearly demonstrate that the well location meets requirements for permit coverage.

Borehole Transect Name	Borehole Number	Borehole Diameter (inches)	Seafloor Depth from MLLW (feet)	Latitude	Longitude	Coordinate Source	Planned Drill Depth (feet)	Are Drilling Fluids likely to be used?*	Projected Start Date	Is the borehole within 3,280 feet of any area described in Table 7?
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
								<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No

*If the applicant answers “No” for the use of Drilling Fluids, please indicate “No Discharge” on the appropriate Discharge Monitoring Report (001) for that individual borehole. The applicant is still required to report for any Discharges (002-012) associated with the Geotechnical Facility even if drilling fluids are not used while actively conducting Geotechnical Surveys.

SECTION 9 – DRILLING FLUIDS TO BE USED IN BOREHOLE DRILLING

Category (check all that apply)	<input type="checkbox"/>	Water-based	Group (check all that apply)	<input type="checkbox"/>	Lignosulfonate
	<input type="checkbox"/>	Other (specify):		<input type="checkbox"/>	Lime
Provide a description of the disposal practice of oil-based, synthetic-based, or other drilling fluids proposed to be used in well drilling in the DFP.				<input type="checkbox"/>	Gyp
				<input type="checkbox"/>	Sea-water
				<input type="checkbox"/>	Saltwater
				<input type="checkbox"/>	Saturated Saltwater
				<input type="checkbox"/>	Non-dispersed (Viscosifier/Polymer) PH/PA

SECTION 10 – INVENTORY OF DISCHARGES
 Check all that apply then indicate the depth of discharge and the maximum daily and average discharge rate, and indicate if you will be requesting a default mixing zone for that discharge (include units of measure).

	Mixing Zone Requested	Discharge Depth:	Max Daily Discharge Rate	Average Discharge Rate
<input type="checkbox"/> 001 Drilling Fluids and Drill Cuttings*	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 002 Deck Drainage	N/A			
<input type="checkbox"/> 003 Domestic Wastewater (See NOI Section 12)	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 004 Graywater (See NOI Section 12)	<input type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> 005 Desalination Unit Waste	N/A			
<input type="checkbox"/> 007 Boiler Blowdown	N/A			
<input type="checkbox"/> 008 Fire Control System Test Water	N/A			
<input type="checkbox"/> 009 Non-Contact Cooling Water	N/A			
<input type="checkbox"/> 010 Uncontaminated Ballast Water	N/A			
<input type="checkbox"/> 011 Bilge Water	N/A			

<input type="checkbox"/> 012 Excess Cement Slurry	N/A			
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*Drilling Fluids Plan (DFP) and Environmental Monitoring Plan (EMP)-Study Plan are required.

SECTION 11 – COMPLIANCE WITH WASTEWATER DISPOSAL REGULATIONS (18 AAC 72)

DOMESTIC WASTEWATER TREATMENT: Provide a brief description of the domestic wastewater treatment process(es) of the facility, including the level of treatment and type of disinfection (if any). Include all makes, models, treatment capacities of the wastewater treatment units, and a schematic (line diagram) of the wastewater treatment process.

ENGINEERED PLAN REVIEW: Proof of a current Approval to Operate (ATO) from DEC for the geotechnical facility indicated in this NOI, satisfies requirements of 18 AAC 72.200 and 72.205. Provide the dates of plan submittal and ATO (if applicable). If you do not have an ATO or have not yet submitted plans, please indicate in the spaces provided below.

Engineered Plan Review Submittal Date:	Approval to Operate Issue Date Date: (Attach ATO Letter)
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MINIMUM TREATMENT WAIVER: In accordance with 18 AAC 72.050(d)(1) – (5) and 18 AAC 72.060(b), an applicant seeking a waiver from the minimum treatment requirements of 18 AAC 72.050(a)(1) or (a)(4) for domestic wastewater discharge 003 or graywater discharge 004, shall provide proof of previous approval or submit a report prepared by a registered engineer. The department will review the report and determine if a waiver or modification will be made in accordance with 18 AAC 72.060. Provide the submittal date for any applicable waiver requests and the approval (if applicable). If you do not have a Minimum Treatment Waiver or have not yet requested one, please indicate in the spaces provided below.

Will graywater (as defined by 18 AAC 72.990(35)) be discharged as a segregated wastewater stream? <input type="checkbox"/> Yes - A waiver is required for Graywater Discharge (003) <input type="checkbox"/> No	Maximum Rated Personnel Capacity of the Facility:	Average Estimated Personnel on this Facility:
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Minimum Treatment Waiver Submittal: Date: Waiver for: (indicate discharge)	Minimum Treatment Waiver Approval (attach Approval): Date:
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SECTION 12 – CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that

there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Title
Printed Name	Date

NOTICE OF INTENT (NOI) CHECKLIST OF ATTACHEMENTS
(Permit Number AKG283100)

The applicant must submit the following information (if applicable) with the NOI:

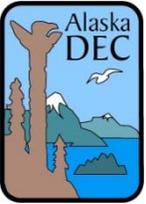
Vicinity Map	<input type="checkbox"/> Included	Submit a vicinity map showing that the approximate location of the project is within the coverage area. Mobile geotechnical facilities must indicate the intended areas of operation (e.g. Survey Area).
Borehole Map	<input type="checkbox"/> Included	Submit initial site assessment with NOI documenting that each borehole site is not located in or near a sensitive marine environment specifically excluded from coverage by this permit (see Table 7 of the permit). Adjust map scale as needed to depict sensitive areas.
Line Drawings and Flow Balances	<input type="checkbox"/> Included	Submit line drawings that show the flow, including rates/volumes of each discharged waste stream through facility. The line drawings must contain flow balances showing average and maximum flow rates between intakes, operations, treatment units, and outfalls.
Environmental Monitoring Program (EMP) Plan of Study	<input type="checkbox"/> Included	Submit EMP Plan of Study (i.e., EMP design and detailed scope of work), including dilution, plume and deposition monitoring (Permit Section 3.3). Include references to or copies of any previously completed EMP Reports.
Other Environmental Reports and Related Plans	<input type="checkbox"/> Included	Provide copies of exploration plans, biological surveys, and environmental reports for the site required by other state (e.g., ADNR, ADFG) and federal (e.g., BOEM, BSEE, NMFS, FWS) agencies that may support NOI requirements.
Drilling Fluid Plan	<input type="checkbox"/> Included	Submit a plan for the formulation and control of drilling fluid/chemical additive systems for each well.
Best Management Practices (BMP) Plan	<input type="checkbox"/> Included	Submit the BMP Plan that incorporates practices to achieve the objectives and specific requirements of the permit.
Quality Assurance Project Plan (QAPP) Certification	<input type="checkbox"/> Acknowledge	Submit a letter certifying that a QAPP for all monitoring required by this general permit has been developed and implemented. Submittal is required with the NOI or within 90 days of discharging.
Plan Review for All Discharges (003 - 004)	<input type="checkbox"/> Included	Submit proof of prior approval or an engineering plan to DEC for written approval before constructing, installing, or modifying a domestic or nondomestic wastewater treatment works (18 AAC 72.200 and 18 AAC 72.205).

Waiver from minimum treatment requirements for domestic wastewater (if applicable).	<input type="checkbox"/> Included	Submit proof of prior approval or an engineering report with a request for written approval of a waiver to DEC's minimum treatment requirements (18 AAC 72.050).
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ATTACHMENT 2 NONCOMPLIANCE NOTIFICATION

Attachment 2

Noncompliance Notification

	Alaska Department of Environmental Conservation Division of Water, Compliance and Enforcement Program 555 Cordova Street Anchorage, Alaska 99501 Nationwide Toll Free: 1(877) 569-4114 Anchorage/International: (907) 269-4114 Fax: (907) 269-4604 E-mail address: DEC-wqreporting@alaska.gov .
NONCOMPLIANCE NOTIFICATION	

GENERAL INFORMATION		PERMIT# (if any):	
Owner or Operator:		Facility Name:	Facility Location:
Person Reporting:		Phone Numbers of Person Reporting:	Reported How? (e.g. by phone):
Date/Time Event was Noticed:		Date/Time Reported:	Name of DEC Staff Contacted:
VERBAL NOTIFICATION MUST BE MADE TO DEC WITHIN 24 HOURS OF DISCOVERY OF NONCOMPLIANCE			
INCIDENT DETAILS (attach additional sheets, lab reports, and photos as necessary)			
Period of Noncompliance	Start Date/Time (exact):		End Date/Time (exact):
If noncompliance has not been corrected, provide a statement regarding the anticipated time the noncompliance is expected to continue:			
Estimated Quantity involved (volume or weight):			
Description of the noncompliance and its cause (be specific):			
Actions taken to reduce, eliminate, and prevent reoccurrence of noncompliance and Actual/Potential Impact on Environmental Health (describe in detail) (e.g. Supplied drinking water to nearby well owners and informed well owners not to drink from wells until further notice)			
Permit Condition Deviation (Identify each permit condition exceeded during the event.)			
<u>Parameter (e.g. BOD pH)</u>	<u>Permit Limit</u>	<u>Exceedance (sample result)</u>	<u>Sample Date</u>
Corrective Actions (Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of recurrence.)			
Environmental Damage: (if yes, provide details below)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Unknown			
Actual /Potential Impact on Environment/Public Health (describe in detail)			
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</p>			
Name:	Title:	Signature:	Date:
FORMS MUST BE SENT TO ADEC WITHIN FIVE DAYS OF BECOMING AWARE OF THE EVENT.			

Table 7: Tier I and II Sensitive Areas

Designating Agency or source document	Name and Location of Area	Sensitive Resource(s)	Timing of Sensitivity
Tier 1 Sensitivity – to be avoided during certain geotechnical survey activities and times of Year			
NSB and BLM	Kasegaluk Lagoon An important habitat for beluga whales (feeding, molting, calving) and spotted seals; subsistence beluga whale hunting area.	Beluga whales – calving, feeding Subsistence (Kasegaluk Lagoon beluga whale hunting) Spotted seals	Beluga whales - June to mid-July Subsistence - mid-June to mid-July Seals – haul outs from August to October
NMFS 2013	Cape Lisbourne, Icy Cape, Wainwright Important summer haul-outs for walrus	Pacific Walrus – onshore haulouts	Walrus - When walrus are present, July, August, September
NMFS 2013	Cross Island An area of importance for fall subsistence bowhead whale hunting for Nuiqsut	Subsistence bowhead whale hunting	Late August to mid-September
ADNR	The Boulder Patch in Stefansson Sound Sensitive and productive benthic habitat	Rocky bottom habitat invertebrates	Year round
Tier 2 Sensitivity – observation of sensitive resources and avoidance of geotechnical survey activities and discharge when present			
USFWS, State of Alaska	Ledyard Bay Critical Habitat Unit Ledyard Bay Critical Habitat Unit for Spectacled Eider encompasses the Chukchi Sea coast from the point 1 nm true north of Cape Lisbourne (68°54'00" N x 166°13'00" W), remaining 1.0 nm offshore of the mean low tide line (maintaining a 1.0 nm buffer from the mean low tide line) of the Alaska coast north and east to 70°20'00" N x 161°56'11" W (1 nm offshore of Icy Cape).	Spectacled eiders and other sea birds, and habitat for beluga whales, and spotted seals.	Spectacled eiders molt July to November. Belugas present in June and July. Spotted seal haul-outs in summer and fall.
NMFS 2013	Barrow Canyon, the Western Beaufort Sea, and the Shelf Break of the Beaufort Sea An area of high biological productivity; a feeding area for bowhead and beluga whales; fall subsistence bowhead whale hunting area.	Bowhead and beluga whales migration Subsistence bowhead whale hunting	Bowhead whales – Sept to Oct. Beluga whales – mid-July to late Sept. Subsistence hunting August 25 to close of hunt.
NMFS 2013	Camden Bay An area of high biological productivity; a feeding area for bowhead whales; fall subsistence bowhead whale hunting area.	Bowhead whale feeding area for mothers and calves	Early September-October

Designating Agency or source document	Name and Location of Area	Sensitive Resource(s)	Timing of Sensitivity
Tier 2 Sensitivity – observation of sensitive resources and avoidance of geotechnical survey activities and discharge when present			
USFWS	Entire Area of Coverage	Polar bears	Denning November-April
BLM	NPRA Special Management Areas		
	Peard Bay Special Area	Spectacled eiders	Nesting season – June-July
	Teshekpuk Lake Special Area	High concentrations of staging and molting brant and other waterbirds	June 20 to September 15
NMFS 2013	Cape Thompson	Nesting colonies of murres, puffins, and kittiwakes	Nesting season - June-July
NMFS 2013	Cape Lisbourne	Nesting colonies of murres, puffins, and kittiwakes	Nesting season - June-July
ADNR	The Canning River Delta	Spawning marine fish	Marine fish - January–December
ADNR	The Colville River Delta	Spawning marine fish, subsistence fishing, seal hunting	Marine fish - January–December Subsistence fishing – July – September Sea hunting – July - September
ADNR	The Cross, Pole, Egg, and Thetis Islands	Nesting and molting seabirds	June–July
ANDR	Flaxman Island	Waterfowl use and polar bear denning areas, including the Leffingwell Cabin national historic site on Flaxman Island	Waterfowl – June – September Polar bear denning - November–April Historic site - Year-round
ADNR	The Jones Island Group (Pingok, Spy, and Leavitt Islands) and Pole Island	Known polar bear denning sites	November–April
ADNR	The Sagavanirktok River delta	Spawning marine fish	January-December
ADNR	Howe Island	Snow goose nesting colony	May–August

Designating Agency or source document	Name and Location of Area	Sensitive Resource(s)	Timing of Sensitivity
Tier 2 Sensitivity – observation of sensitive resources and avoidance of geotechnical survey activities and discharge when present			
Audubon Alaska Important Bird Areas	Barrow Canyon and Smith Bay	Arctic tern, black-legged kittiwake, glaucous gull, king eider, long-tailed duck, Pomarine jaeger, red phalarope, red-throated loon, and sabine’s gull.	Migration and nesting seasons May - September
	Beaufort Sea Nearshore	Arctic tern, brandt, glaucous gull, king eider, long-tailed duck, and red-throated loon.	Migration and nesting seasons - May - September
	Beaufort Sea Shelf Edge 152W71N	Glaucous gull and pomarine jaeger.	Migration and nesting seasons - May - September
	Colville River Delta Marine	Glaucous gull	Migration and nesting seasons - May - September
	Chukchi Sea Nearshore	Arctic tern, black-legged kittiwake, glaucous gull, long-tailed duck, pomarine jaeger, red phalarope, and sabine’s gull.	Migration and nesting seasons - May - September
	Icy Cape Marine	Black-legged kittiwake, glaucous gull, pomarine jaeger.	Migration and nesting seasons - May - September
	Lisbourne Peninsula Marine	Black-legged kittiwake	Migration and nesting seasons - May - September
	Point Lay Marine	Long-tailed duck	Migration and nesting seasons - May - September
EPA 2012a	Spring open water lead system	Seabirds, including listed eiders, and migrating bowhead whales.	Before June 10
EPA 2012a	The Kokolik, Utukok, Kukpowruk and Kuk Rivers Known critical areas.	Larger river systems and estuaries provide important spawning and rearing areas for anadromous fishes. Most marine species spawn in shallow coastal areas during the winter.	Winter
EPA 2012b	Community Subsistence areas. Maps available in EPA 2012b.	Subsistence harvesting for bowhead whale, beluga whale, walrus, and seals. In particularly the fall bowhead whale harvest has a short window of opportunity and is important in terms of culture and contribution to community diet.	Primarily open water subsistence seasons. Fall bowhead whale harvest occurs between mid-August and early October Spring bowhead whale harvest occurs in open leads between early April and early June.

Figure 1: Map of the Area of Coverage for Geotechnical Facilities in State Waters of the Arctic Ocean

