ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

INDIVIDUAL PERMIT MODIFICATION – FINAL

AK0053686 – Kitchen Lights Unit Gas Production Julius R. Platform

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

FURIE OPERATING ALASKA, LLC

is authorized to discharge from the Kitchen Lights Unit Gas Production Julis R. Platform facility at the Cook Inlet Oil and Gas Lease Area (15 miles Northwest of Nikiski Bay) at the following location(s):

Outfall	Receiving Waterbody	Latitude	Longitude
001A	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
001B	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
002A	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
002B	Cook Inlet	See Figure 1	See Figure 1
002C	Cook Inlet	See Figure 1	See Figure 1
002D	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
002E	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
002F	Cook Inlet	60° 56' 12.2"	-151° 9' 22.7"
002G	Cook Inlet	60° 56’ 12.2”	-151° 9” 22.7”
003	Cook Inlet	See Figure 1	See Figure 1
004	Cook Inlet	See Figure 1	See Figure 1
005	Cook Inlet	60° 56’ 12.2”	-151° 9” 22.7”
006	Cook Inlet	60° 56’ 12.2”	-151° 9” 22.7”

In accordance with the discharge point(s) effluent limitations, monitoring requirements, and other conditions set forth herein:

This permit and authorization became effective May 18, 2014 and permit modifications for the discharge of Deck Drainage (Outfall 002G), Non-contact Cooling Water (Outfall 005), Uncontaminated Ballast Water (Outfall 006), and a chronic mixing zone authorization for Non-contact Cooling Water shall become effective May 23, 2016.

This permit and the authorization to discharge shall expire at midnight, May 17, 2019.

The permittee shall reapply for a permit reissuance on or before November 17, 2018, 180 days before the expiration of this permit if the permittee intends to continue operations and discharge(s) at the facility beyond the term of this permit.

The permittee shall post or maintain a copy of this permit to discharge at the facility (Julius R. Platform) and make it available to the public, employees, and subcontractors at the facility.

Wade Strickland	April 22, 2016
Signature	Date
Wade Strickland	Program Manager
Printed Name	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) 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 or Completion	Frequency	Due Date	Submit to[a]
1.1.2	Domestic Wastewater Engineering Plan Submittal per 18 AAC 72.200	1/permit cycle	Submit 30 days minimum before discharge	Permitting
1.2.3.1	Drilling Fluids Plan (DFP)	1/Permit HDD	Submit at least 15 days prior to discharge	Permitting
2.1	Quality Assurance Project Plan (QAPP)	1/permit cycle	Within 180 days after the effective date of the final permit	Compliance
2.2	Written notification that the Platform Operation Best Management Practices (BMP) Plan has been developed, reviewed and implemented	Annual	Within 180 days after the effective date of the final permit	Compliance
2.2	Written notification that the Construction BMP Plans have been developed, reviewed and implemented for pipeline construction barges	1/Permit	Submit at least 15 days prior to discharge	Compliance
2.3	Written notification that Operation and Maintenance Plan has been developed and implemented for platform	1/Permit cycle	Within 180 days after platform installation. The plan shall be retained on site and made available on request to DEC	---
	End of Construction Report	1/Permit Cycle	30 days after end of construction	Compliance
Appendix A, 1.3	Application for Permit Reissuance	1/permit cycle	180 days before expiration of the final permit	Permitting
Appendix A, 2.4	Reports of compliance or noncompliance with a Compliance Schedule	As required	The Report must be submitted no later than 14 days following each schedule date	Compliance
Appendix A, 3.2	Discharge Monitoring Report (DMR)	Monthly	Must be postmarked or submitted on or before the 15th day of the following month	Compliance

Permit Part	Submittal or Completion	Frequency	Due Date	Submit to[a]
Appendix A, 3.4	Oral notification of noncompliance	As Necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance
Appendix A, 3.4	Written documentation of noncompliance	As Necessary	Within 5 days after the permittee becomes aware of the circumstances	Compliance
a) See Appendix A 1.1 for addresses				

1.0 LIMITATIONS AND MONITORING REQUIREMENTS

1.1 Discharge Authorization

1.1.1 During the effective period of this permit, the permittee is authorized to discharge pollutants from Outfalls 001A, 001B, 002A, 002B, 002C, 002D, 002E, 002F, 002G, 003, 004, 005 and 006 specified herein to Cook Inlet, within the limits and subject to conditions set forth herein. This permit authorizes discharge of only those pollutants resulting from facility processes, waste streams, and operations clearly identified in the permit application process.

1.1.2 Prior to discharging domestic wastewater from the Kitchen Lights Unit (KLU) Gas Production Julius R. Platform (Outfall 001A) or the designated seasonal mobile offshore drilling unit (MODU) (Outfall 001B), the permittee must submit treatment system engineering plans for review and approval by the Department per 18 AAC 72.200. Submittal of engineering plans for review must be received no later than 30 days before initiating discharge. Discharges are authorized from the MODU (Outfalls 001B, 002G, 005, and 006) only while it is conducting development or production drilling activities at the Julius R Platform.

1.2 Effluent Limits and Monitoring

The permittee must limit and monitor domestic wastewater discharges from Outfall 001A (Platform) and Outfall 001B (MODU) as specified in Table 2. The permittee must limit and monitor deck drainage discharges from Outfall 002A (Platform), Outfall 002B (Pipeline Lay Barge), Outfall 002C (Pipe Barge) Outfall 002D (Six-person Crane Barge), Outfall 002E (Five-person Crane Barge), and Outfall 002F (Platform Barge), 002G (MODU) as specified in Table 3. The permittee must limit and monitor horizontal directional drilling (HDD) discharges from Outfall 003 as specified in Table 4. The permittee must limit and monitor fire control system test water discharges from Outfall 004 as specified in Table 5. The permittee must limit and monitor non-contact cooling water Outfalls 005 as specified in Table 6 and uncontaminated ballast water discharges from Outfalls 006 as specified in Table 7. All values represent maximum effluent limits, unless otherwise indicated. The permittee must comply with effluent limitations in the table(s) at all times unless otherwise indicated, regardless of monitoring frequency or reporting required by other provisions of this permit.

1.2.1 Domestic Wastewater Discharge Effluent Limits and Monitoring Requirements

Table 2: Outfall 001A and Outfall 001B: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements		
	Daily Minimum	Monthly Average	Daily Maximum	Units	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	N/A	Report	Report	Gallons per Day (GPD)	Effluent	1/Month	Continuous
Biochemical Oxygen Demand (BOD_5)	N/A	30	60	milli grams per liter (mg/L)	Effluent	1/Month [a,]	Grab or Composite [b]
Total Suspended Solids (TSS)	N/A	30	60	mg/L	Effluent	1/Month [a,]	Grab or Composite [b]
Total Residual Chlorine (TRC)	---	N/A	1.0 [c]	mg/L	Effluent	1/Month	Grab
TRC	1.0 [d]	N/A	---	mg/L	Effluent	1/Month	Grab
pH	6.5	N/A	8.5	Standard Units	Effluent	1/Month	Grab
Floating Solids	No Discharge			---	Receiving Water	1/Day [e]	Observation [f]
Foam	No Discharge			---	Receiving Water	1/Day [e]	Observation [g]
Garbage	No Discharge			---	Receiving Water	1/Day [e]	Observation [g]
Oily Sheen	No Discharge			---	Receiving Water	1/Day [e]	Observation [g]
Fecal Coliform Bacteria	N/A	N/A	Report	Count per 100 milli liter (Ct/100 mL)	Effluent	1/Month	Grab
Enterococci Bacteria	N/A	N/A	Report	Ct/100 mL	Effluent	1/Month	Grab

Notes:

a. Effluent sampling frequency for BOD_5 and TSS is increased to weekly when the Seasonal MODU is connected to the KLU Gas Production Julius R. Platform.
b. Composite samples must consist of at least eight grab samples collected at approximately equally spaced intervals.
c. The 1.0 mg/L daily maximum limit is measured after dechlorination and before combining with other discharges.
d. TRC is a surrogate parameter for fecal coliform and enterococci bacteria. For KLU Gas Production Julius R. Platform and the Seasonal MODU, maintain as close to the minimum limit concentration of 1.0 mg/L as possible and measure immediately after chlorination.
e. Only when discharges occur.
f. 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. Observations must follow either the morning or midday meal. Observations must be recorded in daily operating logs and made available upon request by DEC.
g. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at a minimum frequency of once per day. Monitoring of the effluent for 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.

1.2.2 Deck Drainage Discharges Effluent Limits and Monitoring Requirements

Table 3: Outfalls 002A Through 002G: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements		
	Daily Minimum	Monthly Average	Daily Maximum	Units	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	N/A	Report	Report	gpd	Effluent	Monthly	Estimated
Free Oil [a, b, c]	No Discharge			---	Effluent	Daily [d]	Visual
Whole Effluent Toxicity (WET) Testing [e]	Report			Chronic Toxicity Unit (TUc)	Effluent	Once per First Two Years	See Section 1.3

Notes:

a. 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. Visual tests must be recorded in daily operating logs and made available upon request by DEC.

b. For 002A and 002G: Deck drainage must be treated using an oil water separator prior to discharge. If discharge occurs during broken or unstable ice conditions or during stable ice conditions, the Static Sheen Test must be used (see 40 CFR Part 435 Subpart A, Appendix 1) and a grab sample is required. Results must be recorded on Discharge Monitoring Reports (DMRs) and submitted monthly to DEC.

c. For 002B through 002F: Deck drainage must be treated to remove free oil prior to discharge. Monitoring results must be recorded on DMRs and submitted with the End of Construction Report (See Section 2.4).

d. Daily when discharging and the facility is manned. The monitoring frequency is reduced to weekly when the facility is unmanned.

e. WET testing is applicable to Outfalls 002A and 002G only. Samples must be collected downstream of the oil water separator during periods of significant rainfall or snowmelt.

1.2.3 Clay-based Drilling Fluids and Drill Cuttings Effluent Limits and Monitoring Requirements

Table 4: Outfall 003: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits		Monitoring Requirements		
	Daily Minimum	Monthly Average	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow [a]	Report	gpd	Effluent	Continuous	Estimated
Free Oil (Pilot Borehole)[b, c]	No Discharge	---	Effluent	Prior to Discharge	Grab
Free Oil (Ream Borehole)[d]	No Discharge	---	Effluent	While Discharging	Visual
Chemical Inventory[e]	See Section 1.2.3.2	---	---	Monthly	Calculation

Notes:

a. The permittee must maintain a daily log while conducting HDD activities to record estimated flows and volumes, monitoring results, visual observations, and chemical usage. The information must be made available to DEC immediately upon request and summarized in the End of Construction Report (See Section 2.4)

b. The permittee shall collect a sample at the mud pit and conduct a Static Sheen Test within six hours prior to discharging the contents of the pilot borehole. Report the date and time of the sample and the one-time discharge, the total estimated discharge and Static Sheen Test results in the End of Construction Report (See Section 2.4).

c. While drilling the pilot borehole beneath the shoreline, the permittee must monitor the shoreline for the presence of clay-based fluids and cuttings during low tide periods. The permittee must contact DEC immediately if deposits or seeps of clay based drilling fluids and cuttings are observed along the shoreline.

d. The permittee must monitor by observing the surface of the receiving water in the vicinity of the discharge during daylight hours during low and high slack tides. Observations must be made at least daily and be recorded in daily operating log. Visual sheen tests must be recorded on monthly DMRs and submitted in the End of Construction Report (See Section 2.4).

e. The use of chemical additives in the fluid system is prohibited unless approved by the Department (See Section 1.2.3.1.7). All chemicals used in the project and volume calculations must be included in the Chemical Inventory and submitted with the End of Construction Report (See Sections 1.2.3.2 and 2.4).

1.2.3.1 Drilling Fluid Plan Requirements

The permittee must develop and implement a written procedural plan for the formulation and control of clay-based drilling fluid/chemical additive systems used for HDD. The plan must be implemented during drilling operations and a copy of the plan must be available at the HDD drill site at all times.

The permittee must submit a copy of the completed drilling fluid plan to DEC at least 15 days prior to discharge for approval.

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

1.2.3.1.2 An outline of the drilling fluid planning process including names and titles of personnel responsible for implementing the drilling fluid plan at the HDD drill site.

1.2.3.1.3 Discuss the general types of drilling fluids proposed and when and what conditions where the fluids may be used.

1.2.3.1.4 Provide a list including commercial product names, descriptions of the products, estimated and potential 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). Components of the basic drilling fluid must be listed separately from specialty or contingency chemical additives which may be used.

1.2.3.1.5 Provide Material Safety Data Sheets and Ecologic Toxicity Reports, if available;

1.2.3.1.6 A determination of how discharge of clay-based drilling fluids and drill cuttings is expected to meet industry standards and not result in a toxic discharge (e.g. sediment particulate phase toxicity assessment). Operator's determination must be based upon but not limited to, the following criteria:

i. Toxilogical data provided by the supplier;

ii. Consideration of less toxic chemical substitutions;

iii. Estimate of worst-case cumulative discharge toxicity based on additive toxicity estimations or commercially calculated discharge toxicity estimations; and

iv. Description of how overall toxicity is minimized, where possible (See Section 2.2 Best Management Practices Plan).

1.2.3.1.7 A clearly stated procedure for determining whether or not a chemical additive not originally planned for or included in toxicity estimations should be considered as a field modification. The procedure must include contacting DEC for approval prior to use and discharge.

1.2.3.2 Chemical Inventory:

For each fluid mixture discharged, the permittee must maintain a precise chemical inventory of all constituents added, including all additives used to meet specific drilling requirements. The permittee is required to maintain a chemical inventory of chemical additives used and their amounts and submit this information in the End of Construction Report (Section 2.4). The permittee must maintain these records and make them available to DEC upon request.

1.2.4 Fire Control System Test Water Discharge Effluent Limits and Monitoring Requirements

Table 5: Outfall 004: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements		
	Daily Minimum	Monthly Average	Daily Maximum	Units	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	N/A	Report	Report	gpd	Effluent	Monthly	Estimated
Free Oil [a]	No Discharge			---	Effluent	Daily [b]	Visual
Floating Solids, Foam, and Garbage [a]	No Discharge				Effluent	Daily [b]	Visual
Chemical Additives [c]	Prohibited				Effluent	---	---

Notes:

a. The discharge of fire control system test water is limited to those times that a visible observation on the surface water is possible. The permittee must monitor by observing the surface of the receiving water in the vicinity of the outfall during daylight at the time of maximum estimated discharge and slack tide conditions. Observations of visual sheen, floating solids, foam, and garbage must be recorded in daily operating logs and made available upon request by DEC. The permittee must record results on DMRs and submit them in the End of Construction Report (See Section 2.4).

b. When Discharging.

c. The use of chemical additives in the fire control system test water is prohibited.

1.2.5 Non-Contact Cooling Water Discharge Effluent Limits and Monitoring Requirements

Table 6: Outfalls 005: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements		
	Daily Minimum	Monthly Average	Daily Maximum	Units	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	N/A	Report	Report	mgd	Effluent	Monthly	Estimated
Free Oil [a]	No Discharge			---	Effluent	Daily [b]	Visual
Floating Solids, Foam, and Garbage [a]	No Discharge			---	Effluent	Daily [b]	Visual
Chemical Additives [c]	Prohibited			---	Effluent	---	---
Temperature	Report			---	Effluent	Monthly	Measure

Notes:

a. 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.

b. When Discharging.

c. The use of chemical additives in the non-contact cooling system is prohibited.

1.2.6 Uncontaminated Ballast Water Discharges Effluent Limits and Monitoring Requirements

Table 7: Outfall 006: Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements		
	Daily Minimum	Monthly Average	Daily Maximum	Units	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	N/A	Report	Report	mgd	Effluent	Monthly	Estimated
Free Oil [a]	No Discharge			---	Effluent	Daily [b]	Visual
Floating Solids, Foam, and Garbage [a]	No Discharge			---	Effluent	Daily [b]	Visual

Notes:

a. 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. For discharges during stable ice, below ice, to unstable ice or broken ice conditions, a water temperature that approximates surface water temperatures after breakup shall be used. Observations must be recorded in daily operating logs and made available upon request by DEC.

b. When Discharging.

~~1.2.6~~1.2.7 The permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into receiving waters, except as otherwise required by discharge-specific sections of this permit.

~~1.2.7~~1.2.8 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.

~~1.2.8~~1.2.9 If any discharges are commingled, the most stringent effluent limit for each individual discharge shall be applied to the resulting discharge. If the individual discharge is not authorized, the commingled discharge is not authorized.

~~1.2.9~~1.2.10 For all effluent monitoring, the permittee must use a test method that can achieve a method detection limit (MDL) less than the effluent limitation. For a parameter without an effluent limitation, the permittee must use the most sensitive MDL from an Environmental Protection Agency (EPA)-approved analytical test method necessary for compliance monitoring.

~~1.2.10~~1.2.11 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].”

~~1.2.11~~1.2.12 For purposes of calculating a monthly average, zero (0) may be assigned for a value less than the MDL, and the ~~{~~[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].” If a value is equal to or greater than the ML, the permittee must report and use the actual value. The resulting average value must be compared to the compliance level, ML, in assessing compliance.

1.3 WET Testing Requirements

This requirement applies to KLU Gas Production Julius R Platform Deck Drainage (Outfall 002A) and MODU Deck Drainage (Outfall 002G).

1.3.1 The permittee must conduct tests on grab effluent samples with one vertebrate and two invertebrate species, as follows.

1.3.1.1 Vertebrate (survival and growth): *Atherinops affinis* (topsmelt). In the event that topsmelt is not available, *Menidia beryllina* (inland silverside) may be used as a substitute. The permittee shall document the substitute species in the next DMR.

1.3.1.2 Invertebrate: For larval development tests, the permittee must conduct tests with a bivalve species, *Crassostrea gigas*, (Pacific Oyster) or *Mytilus sp*. (mussel). For fertilization tests, the permittee must use an echinoderm, *Strongylocentrotus purpuratus* (purple sea urchin) *or Dendraster excentricus* (sand dollar). Due to seasonal variability, testing may be performed during reliable spawning periods.

1.3.2 The permittee must monitor for toxicity once per year for the first two years. If discharge of deck drainage is initiated after the first year of the permit, sampling must begin during the year following the initiation of deck drainage discharge.

1.3.3 The presence of chronic toxicity must be estimated as specified in *USEPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition (EPA-821-R-02-014). For the bivalve species, chronic toxicity must be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136).

1.3.4 Results must be reported in TUc, where TUc = $100/IC_{25}$. The reported IC_{25} must be the lowest IC_{25} calculated for the applicable survival, growth or fertilization endpoints.

1.3.5 A series of at least five dilutions and a control must be tested. Test series should also be designed to bracket toxicity end points from previous tests to provide meaningful toxicity information during the next permit reissuance.

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

1.3.6.1 If organisms are not cultured by the testing laboratory, concurrent testing with reference toxicants must be conducted, unless the test organism supplier provides control chart data from at least the previous five months of reference toxicant testing. Where organisms are cultured by the testing laboratory, monthly reference toxicant testing is sufficient.

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

1.3.6.3 Control and dilution water should be receiving water, or salinity adjusted lab water. If the dilution water used is different from the culture water, a second control, using culture water must also be used.

1.4 Prohibited Discharges

1.4.1 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.

1.4.2 This permit prohibits any pollutant discharge that is not expressly authorized in the permit.

1.4.3 There shall be no discharge of floating solids, visible foam, or oily wastes that produce a sheen on the surface of the receiving water as per Title 18, Chapter 70 – Water Quality Standards (WQS), Section 20 (18 AAC 70.020).

1.4.4 The discharge of chemicals in toxic amounts is prohibited pursuant to Part 101(a)(3) of the Clean Water Act (CWA §101(a)(3)) and 18 AAC 70.020.

1.5 Mixing Zones

1.5.1 In accordance with state regulations at 18 AAC 70.240 – 70.270, as amended through June 23, 2003, the following mixing zones are authorized.

1.5.1.1 Acute and chronic mixing zones are authorized for TRC for the combined domestic wastewater discharge from Outfall 001A and Outfall 001B from the production platform and the designated MODU, respectively. The acute and chronic mixing zones have the following dimensions and dilution factors:

1.5.1.1.1 An acute cylindrical mixing zone extending from the sea surface to the sea floor with a radius of 11 meters centered at the discharge port and an associated dilution factor of 80, and

1.5.1.1.2 A chronic cylindrical mixing zone extending from the sea surface to the sea floor with a radius of 20 meters centered at the discharge port and an associated dilution factor of 140.

1.5.1.2 A chronic mixing zone is authorized for turbidity for the discharge of Clay-based Drilling Fluids and Drill Cuttings (Outfall 003) from the HDD pilot borehole. The chronic mixing zone has the following dimensions:

1.5.1.2.1 A rectangular chronic mixing zone extending from the sea surface to the seafloor extending 1,000 meters longitudinally in ebb and flood current directions, 645 meters wide, and centered at the point of emergence of the pilot borehole at the seafloor.

1.5.1.3 A chronic mixing zone is authorized for turbidity for the discharge of Clay-based Drilling Fluids and Drill Cuttings (Outfall 003) from the HDD ream borehole. The chronic mixing zone has the following dimensions:

1.5.1.3.1 A cylindrical chronic mixing zone extending from the sea surface to the seafloor with a radius of 645 meters centered over the point of emergence of the ream borehole at the seafloor.

1.5.1.4 A mixing zone is authorized for temperature for the discharge of Non-Contact Cooling Water (Outfall 005)

1.5.1.4.1 A 20 m cylindrical chronic mixing zone centered around the discharge point.

1.6 Zone of Deposit

In accordance with state regulations at 18 AAC 70.210(b) the Department authorizes a zone of deposit (ZOD) to accommodate a onetime episode of HDD needed in the construction of a gathering pipeline. The dimensions of the ZOD will be a 65 meter radius centered over the point of emergence of the borehole at the seafloor.

1.7 Permit Expiration

This permit will expire at midnight on May 17, 2019. A permittee wishing to continue coverage under a reissued permit must submit a new application at least 180 days prior to the expiration of this permit, as described in Standard Conditions, Appendix A, Part 1.3.

2.0 SPECIAL CONDITIONS

2.1 Quality Assurance Project Plan

2.1.1 The permittee must develop a QAPP for all monitoring required by this permit for the discharges resulting from KLU Gas Production Julius R. Platform. A QAPP is not required for construction related discharges. The permittee must submit written notice to DEC that the QAPP has been developed and implemented within 180 days of the effective date of this permit.

2.1.2 The QAPP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and to help explain data anomalies whenever they occur.

2.1.3 Throughout all sample collection and analysis activities, the permittee must use DEC-approved QA/QC and chain-of-custody procedures, as described in the *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 specified in these documents.

2.1.4 At a minimum, a QAPP must include:

2.1.4.1 Details on number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements;

2.1.4.2 Maps indicating the location of each sampling point;

2.1.4.3 Qualification and training of personnel; and

2.1.4.4 Name, address, and telephone number of all laboratories used by or proposed to be used by the permittee.

2.1.5 The permittee must amend the QAPP whenever sample collection, sample analysis, or other procedure addressed by the QAPP is modified.

2.1.6 Copies of the QAPP must be kept on site and made available to DEC upon request.

2.2 Best Management Practices Plan

2.2.1 Purpose. There are two types of BMP Plans required by the permit, one for short-term construction activities and one for long-term facility operation at the KLU Gas Production Julius R. Platform and seasonal MODU. The BMP Plan for KLU Gas Production Julius R. Platform and seasonal MODU must be located onsite and be reviewed and modified annually. BMP Plans for construction must be located on each barge and the HDD drill site. The Construction BMP Plans do not require annual reviews or modifications. Through implementation of the BMP Plans the permittee must prevent or minimize the generation and the potential for release of pollutants from the facility to the lands and waters of the U.S. through normal and ancillary activities.

2.2.2 Development and Implementation Schedule for KLU Gas Production Julius R. Platform. The permittee must develop and implement a Platform Operation BMP Plan which achieves the objectives and the specific requirements listed below. The permittee must submit written notice to DEC that the plan has been developed and implemented within 180 days of the effective date of the permit. Any existing BMP Plan may be modified for compliance with this Part. The permittee must implement provisions of the plan as conditions of this permit within 180 days of the effective date of this permit.

2.2.3 Development and Implementation Schedule for Construction. The permittee must develop and implement a Construction BMP Plans which achieves the objectives and the specific requirements listed below. The permittee must submit written notice to DEC that the plan has been developed and implemented at least15 days prior to discharge. Any existing BMP Plan may be modified for compliance with this Part. The permittee must implement provisions of the plan as conditions of this permit.

2.2.4 Objectives. The permittee must develop and amend the BMP Plans consistent with the following objectives for the control of pollutants.

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

2.2.4.2 Under the BMP Plan and especially within any standard operating procedures 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.

2.2.4.3 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 lands and waters of the U.S. due to equipment failure, improper operation, 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.

2.2.5 Elements of the BMP Plan. The BMP Plan must be consistent with the objectives above and the general guidance contained in *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004, October 1993) and *Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006) or any subsequent revision to these guidance documents.

2.2.5.1 Plan Components. The BMP Plan must include, at a minimum, the following items:

2.2.5.1.1 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.

2.2.5.1.2 The BMP Plan must establish a BMP Committee responsible for developing, implementing, and maintaining the BMP Plan. Specify the structure, functions, and procedures of the BMP Committee.

2.2.5.1.3 Description of potential pollutant sources.

2.2.5.1.4 Risk identification and assessment.

2.2.5.1.5 Standard operating procedures to achieve the above objectives and specific best management practices (see below).

2.2.5.1.6 Reporting of BMP incidents. The reports must include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.

2.2.5.1.7 Materials compatibility.

2.2.5.1.8 Good housekeeping.

2.2.5.1.9 Inspections.

2.2.5.1.10 Preventative maintenance and repair.

2.2.5.1.11 Security.

2.2.5.1.12 Employee training.

2.2.5.1.13 Record keeping and reporting.

2.2.5.1.14 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.

2.2.5.1.15 Final constructed site plans, drawings, and maps (including detailed storm water outfall/culvert configurations).

2.2.6 Specific Best Management Practices. The BMP Plans must establish specific BMPs or other measures to achieve the objectives under Part 2.2.4 which ensure that the following specific requirements are met:

2.2.6.1 Develop Construction BMPs to identify and control pollutant sources associated with the construction of the gathering pipeline and HDD and installation of the platform. BMP Plans must be maintained at the HDD drill site and each construction barge. The DFP submitted and approved by the Department may be adopted by reference in the BMP Plan for the HDD drill site.

2.2.6.2 Develop Platform Operation BMPs that accounts for operation of KLU Gas Production Julius R. Platform with and without the seasonal MODU attached to the platform. The Platform Operation BMPs must consider staffing level transitions and consistency between changes in operations.

2.2.6.3 Develop BMPs to address the use of seawater for the purpose of conducting load tests on structural equipment, if applicable. Practices should address temporary containers and ensuring seawater is not contaminated during the load test and measures and monitoring to ensure narrative WQS are achieved.

2.2.6.4 Develop Platform Operation BMPs to address the prevention of spent grit, dust, dirt, debris or any pollutants generated from surface preparation associated with the practice of sandblasting from being deposited or entering Cook Inlet. Sandblasting or other abrasive techniques that have the potential of depositing scraped or ground debris or any pollutants into Cook Inlet are prohibited for use below the water line of the platform (See Section 1.2.6).

2.2.6.5 Mix chemical additives using manufacturer instructions or per EPA product registration labeling, and limit concentrations to 500 mg/L or less for all chemicals added to waters discharged. This requirement does not pertain to drilling fluids (See Section 1.2.3)

~~2.2.6.5~~2.2.6.6 The BMP Plan must be developed to reflect for 316(b) requirements for the intake of noncontact cooling water. The permittee must select and implement technologies or operational measures to minimize impingement mortality and entrainment of fish and shellfish and include this information in the BMP Plan.

2.2.7 Review and Certification. The Platform Operation BMP must be reviewed and certified as follows:

2.2.7.1 Annual review by the plant manager and BMP Committee.

2.2.7.2 Certified statement the above reviews were completed and 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 on or before January 31 of each year of operation under this permit after the initial BMP submittal (the initial statement must be submitted to DEC six months after submittal of the BMP Plan).

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

2.2.9 BMP Plan Modification

2.2.9.1 The permittee must amend the BMP Plan within 90 days of when a change in the facility or in the operation of the facility materially increases the generation of pollutants or their release or potential release to receiving waters.

2.2.9.2 The permittee must amend the BMP Plan whenever the plan 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 U.S.

2.2.9.3 Any changes to the BMP Plan must be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan must be reported to DEC with the annual certification required under Part 2.2.7.

2.3 Operation and Maintenance Plan

2.3.1 In addition to requirements specified in Appendix A, Part 1.6 of this permit (Proper Operation and Maintenance), within 180 days after completion of construction of the KLU Gas Production Gas Production Julius R. Platform, the permittee shall develop and implement an operation and maintenance plan for the KLU Gas Production Julius R. Platform and designated seasonal MODU domestic treatment systems, after platform installation. The plan shall be retained on site and made available on request to DEC.

2.4 End of Construction Report

The permittee is required to submit an end-of-construction report within 30 days after pipeline and platform installation as determined by the last day that a construction related discharge occurred. The permittee shall report on implementation of the DFP and submit construction-related DMRs that were developed during the season. At a minimum, the End of Construction Report will include the following:

2.4.1 Beginning drill date, completion date, and borehole diameter;

2.4.2 A precise chemical inventory of all constituents added downhole, including all drilling fluid additives used to meet specific drilling requirements;

2.4.3 The base drilling fluid type and material specifications;

2.4.4 The name and total amount of each constituent in the discharged drilling fluid;

2.4.5 The maximum concentration of each constituent in the drilling fluid;

2.4.6 The total volumes of drilling fluid created and added downhole;

2.4.7 The total volumes of drilling fluid discharged to surface waters;

2.4.8 The estimated amount of each constituent in the drilling fluid discharged;

2.4.9 Any unusual observations reported to DEC,

2.4.10 Any DFP field modifications requested by the permittee and approved by the Department, and

2.4.11 Any supplemental information requested by DEC.

2.5 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 navigable waters.

2.6 Air and Land Releases

The permittee must not place, deposit, or allow to be placed or deposited on the premises, any material which may produce, cause or contribute to the spread of disease, create a safety hazard or in any way endanger the health of the public.

Appendix A

Standard Conditions

APPENDIX A

STANDARD CONDITIONS

APDES PERMIT

NONDOMESTIC DISCHARGES

September 2011

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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.Water.WQPermit@alaska.gov

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

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

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

IP	Individual Permit
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.
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 holes drilled to install a pipeline from the onshore entry point to the point of emergence at the seafloor.
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.

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

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	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.
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 *Standard Methods for the Examination of Water and Wastewater*.
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, snowmelt, 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.

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

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.
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 individual permit, means particles generated during drilling into subsurface geologic formations and carried out of the hole with drilling fluids (e.g., clay-based drilling fluids 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	Means circulating clay-based drilling fluid (mud) and chemical additives used in the rotary drilling of wells to clean and condition the borehole and to counterbalance formation pressure.
Drilling Fluid Additives	Include natural thickeners (e.g.; Bentonite clay), natural and modified polymers such as starches, cellulose, zanthium, and guar gums for modifying viscosity, and soda ash and other chemicals to adjust pH.
Drilling site	Means the single, specific geographical location where a horizontal direction drilling rig is positioned (e.g., anchored, secured bottomfast, built on a gravel island or ice pad, etc.) and conducts its drilling activity, including the point of entry by the drilling rig.
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.

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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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.
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 Nth 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: $\sqrt[4]{12x23x34x990} = 55$.
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.
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.

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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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 1st 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 Outfall 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. 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

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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	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.
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	Those facilities that may have let permit coverage lapse but still meet the coverage requirements of the GP.
Report	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.
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.

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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Stable Ice	Means ice that is stable enough to support discharged drilling fluids / drill cuttings, graywater, or domestic waste.
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.
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.
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

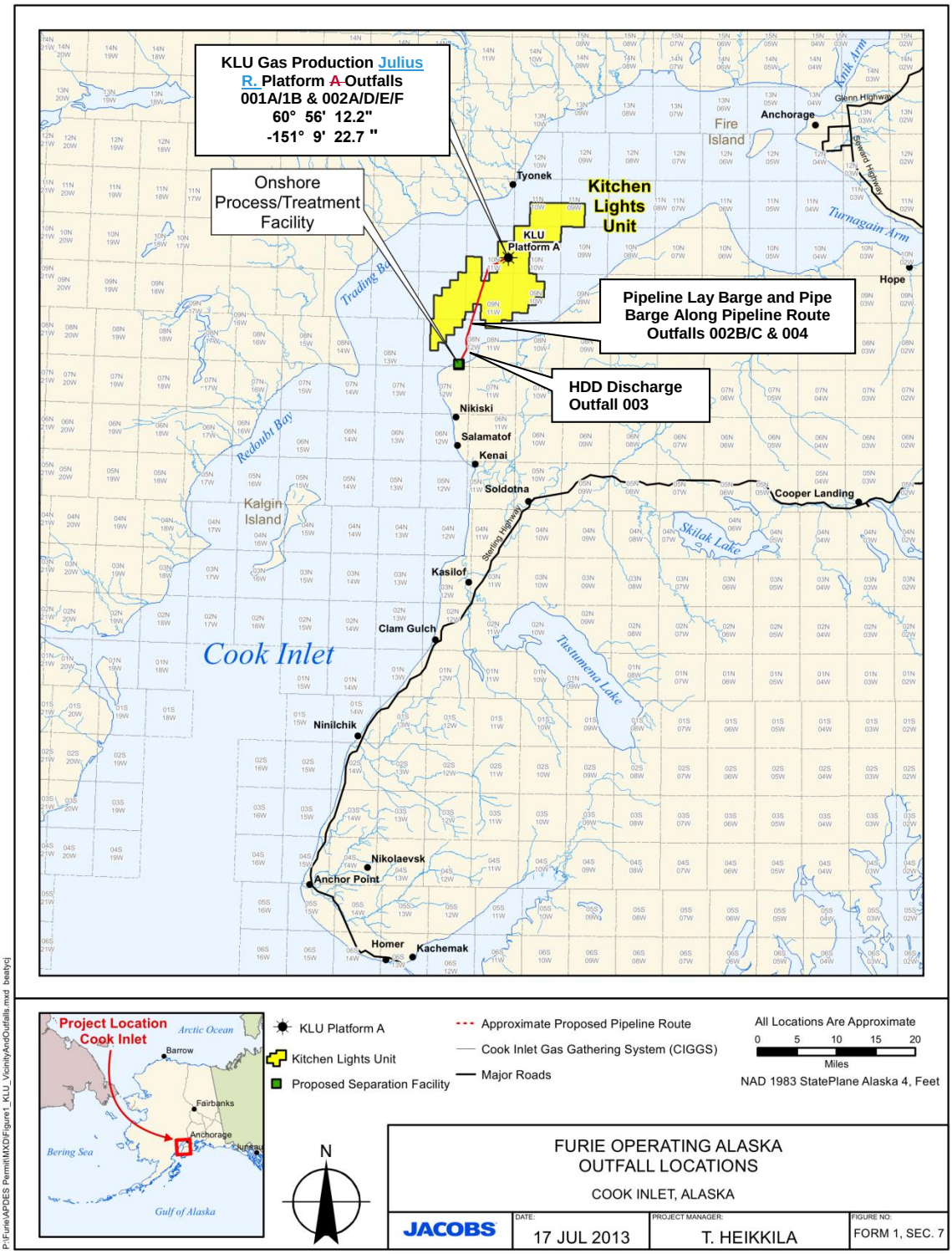
g) See EPA Permit Writers Manual

APPENDIX D. **AREA COVERAGE MAP**

Appendix D

Area Coverage Map

Kitchen Lights Unit Gas Production Julius R. Platform ~~A~~ - Map



Attachment 1

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.)

Parameter (e.g. BOD pH)	**Permit Limit**	**Exceedance (sample result)**	**Sample Date**

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) ☐ **Yes** ☐ **No** ☐ **Unknown**

Actual /Potential Impact on Environment/Public Health (describe in detail)

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.

Name: **Title:** **Signature:** **Date:**

FORMS MUST BE SENT TO ADEC WITHIN FIVE DAYS OF BECOMING AWARE OF THE EVENT.