



ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

INDIVIDUAL PERMIT – PRELIMINARY DRAFT

AK0043354 – ConocoPhillips Alaska, Inc. Kuparuk Seawater Treatment Plant

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

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, 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.

CONOCOPHILLIPS ALASKA, INC.

is authorized to discharge from the Kuparuk Seawater Treatment Plant, Oliktok Point, Simpson Lagoon, Beaufort Sea, Alaska at the following location(s):

Outfall	Description	Receiving Water	Latitude	Longitude
001	Strainer/Filter Backwash	Simpson Lagoon	70.514152	-149.876430
002	Marine Life Return System	Simpson Lagoon	70.512991	-149.872902

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

This Permit and authorization is effective [insert date]

This Permit and the authorization to discharge expires at midnight, [insert date]

The permittee shall reapply for a permit reissuance on or before [insert date], 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. This deadline may be extended by the Department upon request.

The permittee shall post or maintain a copy of this Permit to discharge at the facility and make it available to the public, employees, and subcontractors at the facility.

PRELIMINARY DRAFT

TBD

Signature

Date

PRELIMINARY DRAFT

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 in

Table 1: Schedule of Submissions.

Table 1: Schedule of Submissions

Permit Section	Submittal or Completion	Frequency	Due Date	Submit Via ^{a, b}
1.7; Appendix A, Part 3.2	Discharge Monitoring Report (DMR)	Monthly	Submitted electronically through NetDMR on or before the 28 th of the following month. ^b	NetDMR
3.1	Certification that the Quality Assurance Project Plan (QAPP) has been developed and implemented	1/Permit Cycle	Within 90 Days after the effective date of the Final Permit	Retain Onsite
3.2.2	Certification that the Best Management Practices (BMP) Plan has been developed and implemented	1/Permit Cycle	Within 90 days after the effective date of the Final Permit	Retain Onsite
3.2.6 and 3.2.8.3	Certification of BMP Plan annual review or modification	Annually	By January 31 st of each subsequent after initial BMP Plan execution	Retain Onsite
1.4.1	Notification of Chemical Use	As Necessary	Prior to implementation of chemical use	EDMS
1.4.2	Notification of Drain-Back	As Necessary	Prior to drain-back	EDMS
1.4.2	Drain-Back Reporting	Per Discharge	30-days following drain-back completion	Submit to Permitting
1.3.4; 1.5	Whole Effluent Toxicity Test Results (WET)	Annually when Triggered	Submitted electronically through NetDMR on or before the 28 th of the following month	NetDMR and With Application/ Upon Request
Appendix A, Part 1.3	Application for Permit Reissuance	1/Permit Cycle	180 days before expiration of the Permit	EDMS
Appendix A, Part 3.4, 1.4.3	Written notice of noncompliance (NCN)	As Necessary	Within 5 days after the permittee observes Noncompliance	EDMS
Appendix A, Part 3.5; 1.4.3	Notice of other noncompliance	As Necessary	On or before the 28 th of the following month.	EDMS

Notes:

- a) The Reporting Requirements in this Permit Supersede Inconsistent Requirements in the Standard Conditions (e.g., reporting due dates, reporting portal, etc.)
- b) Environmental Data Management System (EDMS)

1.0 LIMITATIONS AND MONITORING REQUIREMENTS

1.1 Discharge Authorization. During the effective period of AK0043354 – ConocoPhillips Alaska, Inc., Kuparuk Seawater Treatment Plant (Permit), the permittee is authorized to discharge pollutants from Outfall 001 and 002 at the Kuparuk Seawater Treatment Plant, to Simpson Lagoon, Beaufort Sea, within the limits and subject to conditions set forth herein. This Permit authorizes discharge of only those pollutants resulting from facility processes (strainer/filter backwash system, waterflood drain back water, and marine life return system), waste streams, and operations clearly identified in this Permit and the permit application process.

1.2 General Requirements

1.2.1 For all effluent compliance monitoring outlined in Section 1.3, including additional monitoring outlined in Sections 1.5 and 1.6, the permittee must use an analytical test method approved under Code of Federal Regulation Title 40 (40 CFR) Part 136 and adopted by reference at 18 AAC 83.010, that can achieve a reporting limit less than the effluent limit. The permittee must use the method with a sufficiently sensitive method detection limit (See Appendix C – Definitions).

1.2.2 Monitoring of parameters listed in Tables 2 through 3 is required only when discharges occur. However, for months when no discharges have occurred, the permittee must still submit Discharge Monitoring Reports (DMRs) with the box checked indicating “no discharge.”

1.2.3 For purposes of reporting on the DMR for a single sample, if a value is less than the method detection limit, the permittee must report “less than [numeric value of method detection limit]” and if a value is less than a minimum level (ML), the permittee must report “less than [numeric value of ML].”

1.2.4 For purposes of calculating a monthly average, zero (0) may be assigned for a value less than the method detection limit, and the [numeric value of method detection limit] may be assigned for a value between the method detection limit and the ML. If the average value is less than the method detection limit, the permittee must report “less than [numeric value of method detection limit]” 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 limit in assessing compliance.

1.2.5 Since exceedances of the maximum daily limits (MDLs) for all parameters monitored under this permit do not pose a significant threat to human health or the environment, a 24-hour Noncompliance Notification (NCN) is not required unless the exceedance is due to an upset or unanticipated bypass. However, the permittee is still obligated to report any violation within five days of becoming aware of the noncompliance. This timeline ensures timely communication while acknowledging the lower risk associated with these parameters. Violations of all other effluent limits, such as average monthly limits (AMLs), are to be reported per Appendix A, Standard Conditions, Section 3.5 – Other Noncompliance Reporting. See also Appendix D – Noncompliance Notification Flow Chart.

1.2.6 This Permit does not absolve the Permittee from obtaining other authorizations for other state or federal agencies (i.e., Incident Take Authorizations).

1.3 Effluent Limits and Monitoring. In addition to the requirements in Section 1.2, the permittee must comply with pH limits in standard units (SU) and the maximum daily limits (MDLs) and average monthly limits (AMLs) for temperature differential (ΔT) in degrees Celsius ($^{\circ}\text{C}$) in Table 2 and Table 3, as well as total residual chlorine (TRC) in micrograms per liter ($\mu\text{g/L}$) at all times (Table 2). The Outfall 001 discharge is limited to 2.2 million gallons per day (mgd). In addition, the permittee must monitor chronic WET and report results in chronic toxicity units (TU_c) when applicable based on chemical use (Table 2).

Table 2: Effluent Limits and Monitoring Requirements for Strainer/Filter Backwash (Outfall 001)

Parameter	Effluent Limits			Monitoring Requirements	
	Units	MDL	AML	Frequency	Type
Flow	mgd	2.2	Report	Continuous	Meter
pH ⁰	SU	6.0 < pH < 9.0		1/Week	Meter or Grab
Temperature Differential (ΔT) ^{1.3.2}	$^{\circ}\text{C}$	22.0	N/A	Weekly	Meter or Grab
TRC ^{1.3.3}	$\mu\text{g/L}$	100	100	Weekly	Meter or Grab
Chronic WET ^{1.3.4, 1.5}	TU_c	Report	N/A	Annual	Grab

Note: Table notes refer to the Permit Sections below this table.

Table 3: Effluent Limits and Monitoring Requirements for MLRS (Outfall 002)

Parameter	Effluent Limits			Monitoring Requirements	
	Units	MDL	AML	Frequency	Type
Flow	mgd	Report	Report	Continuous	Meter
Temperature Differential (ΔT) ^{1.3.2}	$^{\circ}\text{C}$	13	N/A	Weekly	Meter or Grab

Note: Table notes refer to the Permit Sections below this table.

1.3.1 pH Conditions: The pH must be maintained at values greater than 6.0 and less than 9.0 SU (6.0 < pH < 9.0). The permittee must report the monthly maximum and monthly minimum on the DMR. All procedures for measuring and reporting pH must be clearly described in the QAPP.

1.3.2 ΔT Conditions: Temperature differential is the effluent temperature minus the receiving water temperature as represented by the seawater intake reservoir. The permittee shall monitor the receiving water intake simultaneously with the effluent on a weekly basis while discharging to demonstrate compliance with the temperature limit. The permittee must record the weekly maximum ΔT for the month on the DMR submit all data with the next application for reissuance representing the actual readings from the equipment and not DMR entries

1.3.3 TRC Conditions: The permittee must monitor TRC daily and report the maximum weekly value for the month on the DMR. The application for reissuance must include the daily TRC monitoring data. For the purpose of reporting single sample results for TRC on DMRs, the minimum reporting level for TRC is 100 $\mu\text{g/L}$. Because the facility currently uses TRC laboratory equipment calibrated to detect down to 12 $\mu\text{g/L}$, the following rules for reporting and averaging apply. If equipment modifications result in different calibrations, the new detectable value may be used instead of 12 $\mu\text{g/L}$.

If the facility equipment is calibrated to 12 $\mu\text{g/L}$ (lowest achievable detection), then:

- Report < 12 on the DMR when the equipment reads < 12:
- Report < 100 on the DMR when the equipment reading is between 12 and 100;
- Report on the DMR the actual value when the equipment reports ≥ 100 .

- For averaging, use 0 for < 12; use 12 for readings between 12 and 100; and use the actual value when ≥ 100 .

Data submitted to the Alaska Department of Environmental Conservation (DEC) for the next permit application must represent the actual readings from the equipment and not DMR entries.

All procedures for measuring and reporting TRC must be clearly described in the QAPP.

1.3.4 Chronic WET Monitoring Conditions: Chronic WET monitoring is required annually if and when clarifying chemical additives (e.g., coagulants or flocculants) are used in the clarifier system and discharged. However, this requirement does not pertain to use of hypochlorite during routine operations, followed by de-chlorination prior to discharge, as the TRC limits adequately control this parameter. Chronic WET monitoring is also required during infrequent events where chemically treated waterflood is drained back to the seawater intake system or receiving water (i.e., drain-back of waterflood from pipeline systems). Alternatively, the permittee may develop and implement specific BMPs that ensure no chemicals are in the waterflood at the time of drain back through the seawater intake to void this monitoring requirement for chronic WET (See Section 3.2.5). If WET testing is required for waterflood drain-back, WET testing shall be conducted concurrently with the discharge. Depending on the timing of drain back events, more than one WET sample may be necessary in a given calendar year to comply with this requirement.

1.4 Notifications

1.4.1 Chemical Use Notification. The injection of treatment chemicals other than NALCO 7768 and CHEMLINK 4835 ahead of the strainers without prior notification to the Department is prohibited. This requirement does not pertain to use of hypochlorite during routine operations, followed by de-chlorination prior to discharge. Nor does it pertain to chemicals injected into the finished waterflood downstream of the strainer (e.g., corrosion inhibitors, deaeration chemicals, or biocides) that are not routinely discharged. Drain-back of waterflood containing chemicals is prohibited. See Section 1.3.4 and 1.5 for Chronic WET monitoring conditions and requirements.

1.4.2 Drain-Back Notification. Discharge of waterflood drain-back with chemical additions is prohibited. However, the discharge of drain-back water that has only residual chemicals may be approved as a contingency discharge for emergency repairs. The permittee must develop and implement specific BMPs that ensure that only minor residual chemicals are in the waterflood (e.g., replacing chemical laden waterflood with only filtered seawater) at the time of drain-back. The permittee must notify DEC of the intent to implement the BMP in preparation to discharge drain-back waterflood a minimum of 7-days prior to the proposed discharge. Notification shall include information on the anticipated volume, duration of discharge, and certification that the discharge will have only minor residual chemicals. DEC will coordinate with the Permittee and provide written approval, if appropriate. Approval will be based on demonstration/certification that the waterflood does not have residual chemical concentrations using conservative BMPs to cease chemical injection and purge the pipeline of chemical laden seawater. The written approval will include reporting requirements and may include requirements for additional BMPs.

1.4.3 Non-Compliance Notification (NCN). The Oil and Gas Section has updated the NCN for this Permit to be interactive and accompanied by a flowchart. The permittee must report certain violations of MDLs and AMLs, per Appendix A, Standard Conditions, Section 3.4 – 24-Hour Reporting. For this permit, a 24-hour notice is not required for any MDL unless related to an upset condition or unanticipated bypass. Violations of all other effluent limitations not described in Section 3.4, including MDL exceedances not requiring 24-hour notice, are to be reported per Appendix A, Standard Conditions, Section 3.5 – Other Noncompliance Reporting. The Department has developed a flow chart to assist permittees with determining when 24-hour reporting is required (See Appendix D Noncompliance Notification Flow Chart).

1.4.4 Redirecting Spill Notifications. The DEC Oil and Gas Section has eliminated spill reporting from the NCN Form. Unless there is a sheen notification requirement in the Permit or a spill causes in an effluent limit exceedance or violation of a permit condition, the Department is no longer requiring spill notifications to be reported to the Division of Water. Reporting spills only need to be directed to the DEC Spill Prevention and Recovery (SPAR) Program. While a spill to receiving water is a water quality concern under 18 AAC 70, there are no spill provisions in 18 AAC 83 that directly link it to the Permit. DEC SPAR is appropriate contact for spills; SPAR or an Incident Commander may coordinate with DEC WDAP on water quality issues during the response and closure process. To report a spill to SPAR, go to <https://dec.alaska.gov/spar/ppr/spill-information/reporting/>.

1.5 Chronic WET Requirements. If required per Section 1.3.4, the permittee must conduct chronic WET testing on effluent collected from Outfall 001 per this section.

1.5.1 Test Species and Methods. Dependent upon triggering conditions of chemical use per Section 1.3.4, the permittee is required to conduct chronic WET monitoring on one vertebrate and one invertebrate species on an annual frequency Initial WET testing will consist of determining the less sensitive species between the vertebrate fish *Atherinops affinis* or alternative *Menidia beryllina* (Section 1.5.1.1) and whichever of the available bivalve invertebrate species, and invertebrate shrimp is used (Section 1.5.1.2). Initial testing will also determine the less sensitive between whichever of the available bivalve invertebrates is used and invertebrate shrimp species. The elimination of the less sensitive species over more sensitive invertebrate species must be approved by DEC in writing for use in subsequent chronic WET tests. Subsequently, any substitution based on unavailability between the vertebrate fish listed below in Section 1.5.1.1 and the invertebrate bivalves listed below in Section 1.5.1.2. must also be approved by DEC in writing. The permittee shall not make any changes to the selection of test species or dilution series without prior written DEC approval.

1.5.1.1 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 use of substitute species in the DMR for the testing.

1.5.1.2 Invertebrate: For larval development tests, the permittee must use bivalve species *Crassostrea gigas* (Pacific Oyster) or *Mytilus spp.* (mussel) and *Americamysis bahia* (formerly *Mysidopsis bahia*, mysid shrimp) for survival and growth. Due to seasonal variability, testing may be performed during reliable spawning periods (e.g., December through February for mussels and June through August for oysters).

1.5.2 Monitoring Frequency. When WET monitoring is triggered based on the condition of chemical use in Section 1.3.4, WET monitoring shall be conducted annually (i.e., once per year when new clarifying chemicals are used in the clarifiers).

1.5.3 Procedures. The permittee must conduct chronic WET testing using the following procedures.

1.5.3.1 Methods and Endpoints. For the shrimp and alternate fish species, inland silverside, the presence of chronic toxicity must be estimated as specified in EPA 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 and topsmelt, 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).

The WET testing will determine the 25-percent (%) effect concentration (EC₂₅) endpoint estimate of the effluent concentration that would cause a 25% reduction in normal embryo development for the bivalves or in survival for fish and/or mysid shrimp. The WET testing will also determine the inhibition

concentration (IC_{25}) point estimate of the effluent concentration that would cause a 25 % reduction in the growth of the fish and/or mysid shrimp.

1.5.3.2 Reporting Results. Results must be reported on the DMR using TU_c , where $TU_c = 100/EC_{25}$ or $100/IC_{25}$. The reported EC_{25} or IC_{25} must be the lowest point estimate calculated for the applicable survival, growth or normal embryo development endpoints. If the endpoint is estimated to be above the highest dilution, the permittee must indicate this on the DMR by reporting a less than value for TU_c based on the highest dilution. The permittee must report the no observed effect concentrations (NOECs) in the full WET test report. DEC may compare this information with the IC_{25} during reissuance of this Permit.

1.5.3.3 Acute Toxicity Estimates. Although acute WET testing is not required, the permittee must provide an estimate of acute toxicity based on observations of mortality when appropriate (e.g., vertebrates). Acute toxicity estimates, if available, must be documented in the full report.

1.5.3.4 Dilution Series. A series of at least five dilutions and a control must be tested. The recommended initial dilution series to screen for toxicity is 6.25, 12.5, 25, 50, and 75% along with a control of dilution water (0% effluent). In subsequent tests, the dilution series should be modified to bracket toxicity endpoints observed during previous tests. DEC may provide written direction to modify the previous dilution series or the permittee may request written approval from DEC to modify the dilution series based on previous test results.

1.5.3.5 Hold Times. The logistics of shipping WET samples to the lower 48 can be challenging as poor weather delays or missed connections during shipping can result in violation of the standard 36-hour hold time. The Permittee may request an extension of the hold time if extenuating circumstances occur but must not exceed 72 hours. The permittee must document the conditions that resulted in the need for the holding time to exceed 36 hours and any potential effect the extended hold time could have on the test results and include in the test report.

1.5.3.6 Additional Quality Assurance Procedures. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:

- 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.
- 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 shall re-sample and re-test within the following month.
- Control and dilution water must 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.

1.5.4 WET Reporting.

1.5.4.1 DMRs and Full Report Deliverables. The permittee shall submit chronic WET test results on the DMR following the month of sample collection. The permittee must also submit the full WET Toxicity Report with the next application for reissuance or upon Department request per Section 1.7.2.

1.5.4.2 Full Report Preparation. The report of results shall include all relevant information outlined in Section 10 of Report Preparation in the U.S. EPA 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).

1.5.4.3 Additional Reporting Information. In addition to toxicity test results, the permittee shall report:

- The date and time of sample collection and initiation of each test,
- The flow rate at the time of sample collection, and
- A list of corrosion inhibitors, biocides, algacides, clarifying agents, or other additives being used by facility that could potentially be in the strainer/filter backwash system effluent during the 30-day period preceding sampling, including the following three components:
 - type of each chemical (product name) injected upstream of the strainers,
 - estimated concentrations listed in item 1) that are injected upstream of the strainers, and
 - estimated volume of chemically treated strainer backwash.

1.6 Additional Monitoring.

1.6.1 Sufficiently Sensitive Methods. Additional monitoring for effluent must use methods with method detection limits that are less than the effluent limitations or are sufficiently sensitive per Section 1.2.1 Monitoring effluent or receiving water for the purpose of comparing to water quality criteria must use methods that are less than the applicable criteria or are sufficiently sensitive. See Appendix C for definition of sufficiently sensitive.

1.6.2 Additional Samples by Permittee. The permittee also has the option of taking more frequent samples than required under the Permit. These additional samples must be used for averaging if they are conducted using the Department approved test methods (generally found in 18 AAC 70 and 40 CFR 136 [adopted by reference in 18 AAC 83.010]). The results of any additional monitoring must be included in the calculation and reporting of the averaged data on DMRs as required by the Permit and Standard Conditions Part 3.2 and 3.3 (Appendix A). All individual sample data collected during the permit term must be submitted with the next application for reissuance.

1.6.3 Request for Additional Monitoring. DEC may require additional monitoring of effluent or receiving water for facility or site-specific purposes, including, but not limited to: obtaining data to support applications, demonstrating of water quality protection, obtaining data to evaluate ambient water quality, evaluating causes for elevated parameters in the effluent, and conducting chronic WET toxicity identification and reduction evaluations. If additional monitoring is required, DEC will provide the permittee or applicant the request in writing.

1.7 Monitoring and Reporting Requirements.

1.7.1 Reporting Requirements: DEC has developed the Environmental Data Management System (EDMS) as the application portal and portal for submitting documents required for compliance, except for DMRs. Although DEC intends to eventually consolidate all reporting into EDMS, this is not currently possible. Therefore, permittees must use NetDMR to submit DMRs and EDMS for all other reporting needs. Once DEC makes EDMS fully functional and retires NetDMR, the Standard Conditions will be updated to reflect the new submittal process and put it out for a 30-day public notice before being formally adopted. Until that time, the Reporting Requirements stated in the Permit supersede any temporary inconsistencies in the transitional Standard Conditions. Permittees will be notified if this transition occurs during the Permit term

1.7.2 Discharge Monitoring Report Submittals: The permittee must submit a DMR for each month by the 28th day of the following month. Until EDMS is established as the sole reporting portal, DMRs shall be submitted electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127). Authorized persons may access permit information by logging into the NetDMR Portal (<https://cdxnodengn.epa.gov/oeca-netdmr-web/action/login>). Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g., WET reports, etc.), must be submitted with the next application for reissuance or upon Department request. Note that EDMS may be used to upload such items as “other reports”.

1.7.3 Other Reports and e-Reporting Phase II Implementation: The Department is integrating electronic reporting in EDMS for other reports required by the Permit per Phase II of the E-Reporting Rule (e.g., Certifications and Noncompliance Notifications). Once reports are established in EDMS, the Department does not intend to allow submittals by alternative means to EDMS (e.g., hard copy, emails, etc.), except temporarily with written approval from the Department on a case-by-case basis depicting extenuating circumstances. DEC recommends using EDMS for all submittals, with the exception of DMRs, until further notice. If any questions or uncertainties arise, DEC advises permittees to contact the Department for assistance.

1.7.4 Additional Information: DEC intends to make EDMS the sole reporting portal at some indefinitive time in the future. DEC will keep permittees apprised as this transition nears. DEC has established an e-Reporting Information website at <http://dec.alaska.gov/water/compliance/electronic-reporting-rule/> that contains general information about this new reporting format. Support for EDMS and training materials and webinars for NetDMR can be found at Electronic Reporting (alaska.gov)

2.0 MIXING ZONES

2.1 Parameters Authorized. An acute mixing zone is authorized for Outfall 001. Chronic mixing zones are authorized for both Outfalls 001 and 002. The authorized parameters for the acute and chronic mixing zones are summarized below:

2.1.2 Outfall 001: Parameters authorized in the acute mixing zone include TRC. Parameters authorized in the chronic mixing zone include TRC, chronic WET, and temperature (as $\Delta T^{\circ}\text{C}$).

2.1.3 Outfall 002: Parameters authorized in the chronic mixing zone include temperature (as $\Delta T^{\circ}\text{C}$).

2.2 Mixing Zone Sizes, Orientations, and Dilution Factors. The acute mixing zone for Outfall 001 and chronic mixing zones for Outfalls 001 and 002 are rectangular in shape with the area centered on their respective single port diffusers and extend from the seafloor to the unfrozen sea surface. The aerial dimensions of these mixing zones are as follows:

2.2.1 For Outfall 001, the acute mixing zone is rectangular with the center at the discharge port and has a length of 48 meters (m) (24 m in each prevailing current direction) aligned perpendicular to the diffuser and a width of 94 m. The associated dilution factor is 7.5.

2.2.2 For Outfall 001, the chronic mixing zone is rectangular with the center at the discharge port and has a length of 566 m (283 m in each prevailing current direction) aligned perpendicular to the diffuser and a width of 317 m. The associated dilution factor is 16.3.

2.2.3 For Outfall 002, the chronic mixing zone is rectangular with the center at the discharge port and has a length of 289 m (144.5 m in each prevailing current direction) aligned perpendicular to the diffuser and a width of 120 m. The associated dilution factor is 7.75.

3.0 SPECIAL CONDITIONS

3.1 Quality Assurance Project Plan. The permittee must develop a facility specific QAPP for all monitoring required by this Permit. The permittee must certify in writing that the QAPP is up to date and is being implemented within 90 days of the effective date of this Permit; the certification date determines compliance with this requirement. The initial certification shall be retained onsite with the QAPP and made available to DEC upon request. Any existing QAPP may be modified under this Section.

All procedures in the previous QAPP must be followed until the new QAPP has been implemented.

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

The permittee may use the generic DEC Wastewater Treatment Facility Quality Assurance Project Plan (DEC QAPP) as a template to develop a facility specific QAPP required per Section 3.1. If using the generic DEC template, the developed QAPP must be specific for the facility.

Throughout all sample collection and analysis activities, the permittee must use DEC-approved Quality Assurance/Quality Control (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.

3.1.1 At a minimum, a QAPP must include:

3.1.1.1 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;

3.1.1.2 Maps indicating the location of each sampling point;

3.1.1.3 Qualification and training of personnel; and

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

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

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

3.2 Best Management Practices Plan

3.2.1 Purpose: Through implementation of the BMP Plan the permittee must prevent or minimize the generation and the potential for release of pollutants from the facility to the waters of the United States (WOTUS) through normal and ancillary activities.

3.2.2 Development and Implementation Schedule: The permittee must develop and implement a BMP Plan which achieves the objectives and the specific requirements listed below. The permittee must certify in writing that the plan has been developed and implemented within 90 days of the effective date of the Permit; the certification date determines compliance with this requirement. The initial certification shall be retained onsite with the BMP Plan and made available to DEC upon request. An existing BMP Plan may be modified for compliance with this Section.

3.2.3 Objectives: The permittee must develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.

3.2.3.1 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.

3.2.3.2 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.

3.2.3.3 Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to WOTUS 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.

3.2.4 Elements of the BMP Plan: The BMP Plan must be developed to be consistent with the objectives above and generally consistent with the *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004, October 1993), *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.

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

3.2.4.1.1 **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.

3.2.4.1.2 **BMP Committee:** 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.

3.2.4.1.3 Description of potential pollutant sources.

3.2.4.1.4 Risk identification and assessment.

3.2.4.1.5 Standard operating procedures to achieve the above objectives and specific best management practices (see Section 3.2.3).

3.2.4.1.6 **Reporting Procedures for 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.

3.2.4.1.7 Materials compatibility.

3.2.4.1.8 Good housekeeping.

3.2.4.1.9 Inspections.

3.2.4.1.10 Preventative maintenance and repair.

3.2.4.1.11 Security.

3.2.4.1.12 Employee training.

3.2.4.1.13 Record keeping and reporting.

3.2.4.1.14 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.

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

3.2.5 Specific BMP Requirements: In addition to the BMPs requirements in Section 3.2.4, the Permit requires that the BMP Plan include specific BMPs for the following when applicable.

3.2.5.1 A specific BMP (e.g., a chemical-dosing matrix) to optimize the use of coagulants and other clarifying agents when applicable.

3.2.5.2 Specific BMPs for preventing treatment chemicals in waterflood that could be drained back to the seawater intake reservoirs to facilitate pipeline maintenance and repairs. See section 1.4.2 for additional information on obtaining approval upon implementing these BMPs.

3.2.6 Review and Certification: The BMP must be reviewed and certified as follows:

3.2.6.1 Annual review by the plant manager or other qualified personnel and BMP Committee.

3.2.6.2 Certified statement that 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 completed on or before January 31st of each year of operation and retained onsite with the BMP Plan.

3.2.7 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.

3.2.8 BMP Plan Modifications.

3.2.8.1 The permittee must amend the BMP Plan whenever 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.

3.2.8.2 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 WOTUS.

3.2.8.3 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 Section 3.2.5.

Appendix A – Standard Conditions: APDES Permit Nondomestic Discharges

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

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

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

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

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 (<https://dnr.alaska.gov/parks/oha/index.htm>), 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, Signature Requirement 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, Signature Requirement 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) \$200,000; (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 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 <https://www.akleg.gov/basis/aac.asp>

40 CFR – Code of Federal Regulations Title 40: Protection of Environment. Available at <https://www.ecfr.gov/current/title-40>

AML – Average Monthly Limit

AS 46.03 – Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at <http://www.legis.state.ak.us/default.htm>

BMP – Best Management Practice

°C – Degrees Celsius

DEC – Alaska Department of Environmental Conservation

DMR – Discharge Monitoring Report

eDMR – Electronic Discharge Monitoring Report

EC₂₅ – Effect Concentration 25%

EPA – U.S. Environmental Protection Agency

µg/L – Micrograms per Liter

IC₂₅ – Inhibition Concentration 25%

m – Meters

MDL – Maximum Daily Limit

mgd – Million gallons per day

NOEC – No Observed Effect Concentration

QA/QC – Quality Assurance/Quality Control

QAPP – Quality Assurance Project Plan

STP – Seawater Treatment Plant

SU – Standard Units

ΔT – Change in Temperature

TRC – Total Residual Chlorine

TU_c – Toxic Unit, Chronic

AK0043354

µg/L – Micrograms per liter

WET – Whole Effluent Toxicity

WOTUS – Waters of the United States

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.

Administrator^a – Means the Administrator of the EPA or an authorized representative.

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.

Annual – Means once per calendar year.

Aquaculture^b – Means the cultivation of aquatic plants or animals for human use or consumption.

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.

Backwash – Means wash water resulting from the backwashing of a water filter.

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.

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.

Boundary^b – Means line or landmark that serves to clarify, outline, or mark a limit, border, or interface.

Bypass^a – Means the intentional diversion of waste streams from any portion of a treatment facility.

Chemical Oxygen Demand (COD)^f – Is used as a measure of the oxygen equivalent of the organic matter content of a sample that is susceptible to oxidation by a strong chemical oxidant.

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.

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.
- Cooling Water** – Means once-through non-contact cooling water.
- 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.
- Datum** – A datum defines the position of the spheroid, a mathematical representation of the earth, relative to the center of the earth. It provides a frame of reference for measuring locations on the surface of the earth by defining the origin and orientation of latitude and longitude lines.
- Department**^a – Means the Alaska Department of Environmental Conservation.
- Design Flow**^a – Means the wastewater flow rate that the plant was designed to handle.
- 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.
- Dissolved Oxygen (DO)**^b – Means the concentration of oxygen in water as determined either by the Winkler (iodometric) method and its modifications or by the membrane electrode method. The oxygen dissolved in water or wastewater and usually expressed in milligrams per liter or percent saturation.
- Ecosystem**^b – Means a system made up of a community of animals, plants, and bacteria and the system’s interrelated physical and chemical environment.
- Effect Concentration** – A point estimate of the toxicant concentration that would cause an observable adverse affect on a quantal, “all or nothing,” response (e.g., death, immobilization, or serious incapacitation) in a given percent of the test organisms, calculated by point estimation techniques.
- 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.
- 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.

Final Approval to Operate – Means the approval that the Department issues after it has reviewed and approved the construction and operation of the engineered wastewater treatment works plans submitted to the Department in accordance with 18 AAC 72.215 through 18 AAC 72.280 or as amended.

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:

$$\sqrt[4]{12 \times 23 \times 34 \times 990} = 55$$

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.

Influent – Means untreated wastewater before it enters the first treatment process of a wastewater treatment works.

Inhibition Concentration 25% (IC₂₅)^c – Means the point estimate of the toxicant concentration that would cause 25% reduction in a nonquantal biological measurement of the test organisms, such as reproduction or growth.

Lethal Concentration 50% (LC₅₀)^c – Mean the point estimate of the toxicant that would be lethal to 50% of the test organisms during a specific period.

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.

Mean Lower Low Water^b – Means the tidal datum plane of the average of the lower of the two low waters of each day, as would be established by the National Geodetic Survey, at any place subject to tidal influence.

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.

Method Detection Limit (MDL)^d – Means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

Micrograms per Liter (µg/L)^b – Means the concentration at which one millionth of a gram (10⁻⁶ g) is found in a volume of one liter.

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.

Minimum Level (ML)^e – Means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed. This level is used as the compliance level if the effluent limit is below it.

- 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.
- No Observed Effect Concentration (NOEC)**^c – Means the highest concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation. NOEC is determined using hypothesis testing.
- 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.
- Practical Quantification Limit (PQL)**^g – Means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
- Primary Contact Recreation** – See Contact Recreation.
- 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.
- Quality Assurance Project Plan (QAPP)** – Means a system of procedures, checks, audits, and corrective actions to ensure that all research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.
- Quarter** – Means the time period of three months based on the calendar year beginning with January.
- 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)).
- Recorded** – Means a permanent record using mechanical or electronic equipment to provide a totalized reading, as well as a record of instantaneous readings.
- 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.

Settleable Solids^b – Means solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), *Standard Methods for the Examination of Water and Wastewater*, 18th edition (1992), adopted by reference in 18 AAC 70.020(c)(1).

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.

Significant Industrial User (SIU)^g – Means an indirect discharger that is the focus of control efforts under the national pretreatment program; includes all indirect dischargers subject to national categorical pretreatment standards, and all other indirect dischargers that contribute 25,000 gpd or more of process wastewater, or which make up five percent or more of the hydraulic or organic loading to the municipal treatment plant, subject to certain exceptions [40 CFR 403.3(t)].

Sufficiently Sensitive Methods – Per 40 CFR 122.21(a)(3), a method approved under 40 CFR 136 is sufficiently sensitive when:

- (A)– The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured parameter, or
- (B)– The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge, or
- (C)– The method has the lowest ML of the analytical methods approved under 40 CFR 136 for the measured pollutant or pollutant parameter.

Suspended Solids – Means insoluble solids that either float on the surface of, or are in suspension in, water, wastewater, or other liquids. The quantity of material removed from wastewater in a laboratory test, as prescribed in *Standard Methods for the Examination of Water and Wastewater* and referred to as nonfilterable.

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.

Toxic Unit, Chronic (TUc)^e – Means the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., 100/NOEC).

Untreated Waterflood – Untreated waterflood is water from the same source as normal waterflood without the concomitant contamination from chemicals or compounds used to treat normal waterflood prior to its injection into an oil formation. Typical chemicals or compounds usually consist of de-scalers, biocides, and oxygen scavengers.

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 Depth – Means the depth of the water between the surface and the seafloor as measured at MLLW.

Waterflood – Waterflooding or water injection is where water is injected into an oil field, usually to increase pressure and thereby stimulate production.

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.

Zone of Deposit – Means the total area of the bottom in marine or estuarine waters in which DEC has authorized the deposit of substances in exceedance of the water quality criteria in 18 AAC 70.020(b) and the antidegradation requirement in 18 AAC 70.010(c).

Notes:

- 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. Noncompliance Notification Flow Chart

