



## ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

### INDIVIDUAL PERMIT – FINAL

Permit Number: **AK0022543**

#### 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

#### MUNICIPALITY OF ANCHORAGE, ANCHORAGE WATER & WASTEWATER UTILITY

is authorized to discharge from the Eagle River Wastewater Treatment Facility (WWTF) at 15524 Artillery Road, Eagle River, Alaska at the following location(s):

Outfall	Receiving Water or Body	Latitude	Longitude
001A	Eagle River	61.321667 North	149.591944 West

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

- This permit and authorization shall become effective **February 1, 2026**
- This permit and the authorization to discharge shall expire at midnight, **January 31, 2031**

The permittee shall reapply for a permit reissuance on or before **August 5, 2030**, 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 and make it available to the public, employees, and subcontractors at the facility.

  
Signature

James Rypkema  
Printed Name

December 3, 2025  
Date

Program Manager  
Title

## TABLE OF CONTENTS

SCHEDULE OF SUBMISSIONS.....	3
1.0 LIMITATIONS AND MONITORING REQUIREMENTS .....	4
1.1 Discharge Authorization.....	4
1.2 Effluent Limits and Monitoring .....	4
1.3 Whole Effluent Toxicity (WET) Testing Requirements .....	9
1.4 Mixing Zone.....	12
1.5 Receiving Waterbody Monitoring.....	12
1.6 Additional Monitoring.....	13
2.0 SPECIAL CONDITIONS .....	13
2.1 Quality Assurance Project Plan.....	13
2.2 Operation and Maintenance Plan .....	14
2.3 Industrial User Survey .....	15
2.4 Electronic Reporting (E-Reporting) Rule.....	16
2.5 Identification Sign(s).....	16
2.6 Removed Substances .....	16

## TABLES

Table 1: Schedule of Submissions.....	3
Table 2: Outfall 001A: Effluent Limits and Monitoring Requirements (June 1 - September 30) .....	6
Table 3: Outfall 001A: Effluent Limits and Monitoring Requirements (October 1 - May 31) .....	8
Table 4: Receiving Waterbody Monitoring Requirements.....	13

## APPENDICES

Appendix A – Standard Conditions	
Appendix B – Acronyms	
Appendix C – Definitions	

# 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 <sup>a</sup>
Permit Section 2.4, Appendix A, Section 3.2	Discharge Monitoring Report (DMR)	Monthly	Must be submitted electronically through the NetDMR system, on or before the 15th day of the following month.	NetDMR
Permit Section 1.3	Whole Effluent Toxicity (WET) Monitoring	As required	The permittee shall submit the results of the toxicity tests with the DMR following the month in which the results are received.	Compliance
Permit Section 1.5	Receiving Waterbody Monitoring	1/ permit cycle	Submit receiving waterbody monitoring results with the application for permit reissuance.	Permitting
Permit Section 2.3	Industrial User Survey	1/permit cycle	180 days before expiration of the final permit	Permitting
Appendix A, Section 1.3	Application for Permit Reissuance	1/permit cycle	180 days before expiration of the final permit	Permitting
Appendix A, Section 3.4	Oral notification of noncompliance	As required	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance
Appendix A, Section 3.4	Written notification of noncompliance	As required	Within 5 days after the permittee becomes aware of the circumstances	Compliance
Appendix A, Section 3.5	Other Noncompliance Reporting	As required	At the time the permittee submits DMRs under Appendix A, Section 3.2.	Compliance
Note:				
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 Outfall 001A specified herein to Eagle River, 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.

### **1.2 Effluent Limits and Monitoring**

- 1.2.1 The permittee must limit and monitor discharges from Outfall 001A as specified in Table 2 and Table 3. 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.
- 1.2.2 Discharge shall not cause contamination of surface or ground waters, and shall not cause or contribute to a violation of the Alaska Water Quality Standards (AAC) Title 18 (18 AAC 70), except if excursions are authorized in accordance with applicable provisions in 18 AAC 70.200 – 70.240 (e.g. variance, mixing zone).
- 1.2.3 The permittee must not discharge any floating solids, debris, sludge, deposits, foam, scum, or other residues that cause a film, sheen or discoloration on the surface of the receiving water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.
- 1.2.4 Influent samples must be collected prior to the waste stream flowing into the first treatment unit of the wastewater treatment system.
- 1.2.5 Effluent samples must be collected from the effluent stream after the last treatment unit before discharge into receiving waters.
- 1.2.6 For all effluent monitoring, the permittee must use a sufficiently sensitive Environmental Protection Agency (EPA) approved test method that quantifies the pollutants to a level lower than applicable limits or water quality standards or use the most sensitive test method available, per Title 40 Code of Federal Regulations (CFR) §136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), adopted by reference at 18 AAC 83.010(f).
- 1.2.7 For purposes of reporting on the discharge monitoring report (DMR) for a single sample, if a value is less than the method detection limit (MDL), the permittee must report “less than (<) {numeric value of MDL}” and if a value is less than the minimum level (ML) [also called a reporting limit (RL), practical quantification limit (PQL), or limit of quantitation (LOQ)], the permittee must report “less than (<) {numeric value of ML}.”

- 1.2.8 For purposes of calculating monthly averages, zero may be assigned for values less than the MDL and the numeric value of the MDL may be assigned for values 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.
- 1.2.9 Permittees have the option of taking more frequent samples than are required in the permit. These 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) and if the method detection limit (MDL) is less than the effluent limit.
- 1.2.10 For purposes of calculating the reported daily maximum pounds per day, the permittee must use the maximum observed effluent flow rate measured on the date the effluent sample was collected. For purposes of calculating the reported weekly or monthly pounds per day, the permittee may use the appropriate average flow, weekly or monthly.

*(Table 2: Outfall 001A: Effluent Limits and Monitoring Requirements (June 1 - September 30) located on the following page.)*

**Table 2: Outfall 001A: Effluent Limits and Monitoring Requirements (June 1 - September 30)**

Parameter	Effluent Limits					Monitoring Requirements		
	Units <sup>a</sup>	Daily Minimum	Monthly Average	Weekly Average	Daily Maximum	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	mgd	N/A	Report	N/A	2.5	Effluent	Continuous	Recorded
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	N/A	30	45	60	Influent and Effluent <sup>b</sup>	1/Week	24-hour Composite <sup>c</sup>
	lbs/day <sup>d</sup>		625	938	1,251			Calculated
Total Suspended Solids (TSS)	mg/L	N/A	30	45	60	Influent and Effluent	1/Week	24-hour Composite
	lbs/day		625	938	1,251			Calculated
BOD <sub>5</sub> & TSS Minimum Percent (%) Removal	%	N/A	85 <sup>e</sup>	N/A	N/A	Influent and Effluent	1/Month	Calculated
Fecal coliform Bacteria (FC)	FC/100 mL	N/A	20 <sup>f</sup>	N/A	40 <sup>g</sup>	Effluent	1/Week	Grab
pH	SU	6.5	N/A	N/A	8.5	Effluent	5/Week	Grab
Temperature	° C	N/A	N/A	N/A	Report	Effluent	5/Week	Grab
Dissolved Oxygen (DO)	mg/L	Report	N/A	N/A	N/A	Effluent	1/Month	Grab
Total Dissolved Solids (TDS)	mg/L	N/A	N/A	N/A	Report	Effluent	2/Period <sup>j</sup>	24-hour Composite
Cyanide, as free cyanide	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	Grab
Mercury	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	Grab
Copper, total recoverable	mg/L	N/A	N/A	N/A	0.026	Effluent	2/Period	24-hour Composite
	lbs/day	N/A	N/A	N/A	0.55			Calculated
Lead, total recoverable	mg/L	N/A	N/A	N/A	0.030	Effluent	2/Period	24-hour Composite
	lbs/day	N/A	N/A	N/A	0.63			Calculated
Zinc, total recoverable	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	24-hour Composite
<i>Escherichia coli</i> ( <i>E. coli</i> )	cfu/100 mL	N/A	126 <sup>f</sup>	N/A	410 <sup>g</sup>	Effluent	1/Month <sup>h</sup>	Grab
Total Nitrate/Nitrite, as N	mg/L	N/A	44.8	N/A	50.4	Effluent	1/Month <sup>i</sup>	24-hour Composite
	lbs/day	N/A	934	N/A	1051			Calculated
Total Ammonia, as N	mg/L	N/A	5.9	N/A	19.7	Effluent	1/Month	24-hour Composite
	lbs/day	N/A	123	N/A	410			Calculated

Footnotes:

- a. Units: mgd = million gallons per day, mg/L = milligrams per liter, lbs/day = pounds per day [(design flow in million gallons per day (mgd)) x (concentration in mg/L) x 8.34], FC/100 mL = Fecal Coliform per 100 milliliters, SU= standard units, °C= degrees Celsius, µg/L = micrograms per liter, cfu/100 mL = colony forming units per 100 milliliters.

- b. Limits apply to effluent. Report average monthly influent concentration. Influent and effluent composite samples shall be collected during the same hour period.
- c. See APPENDIX C for definition.
- d.  $\text{lbs/day} = \text{concentration (mg/L)} \times \text{flow (mgd)} \times 8.34 \text{ (conversion factor)}$
- e. Minimum % Removal =  $[(\text{monthly average influent concentration in mg/L} - \text{monthly average effluent concentration in mg/L}) / (\text{monthly average influent concentration in mg/L} \times 100)$ . The monthly average percent removal must be calculated using the arithmetic mean of the influent value and the arithmetic mean of the effluent value for that month.
- f. If more than one FC bacteria or E. coli sample is collected within the reporting period, the average result must be reported as the geometric mean.  
When calculating the geometric mean, replace all results of zero, 0, with a one, 1. The geometric mean of “n” quantities is the “nth” root of the product of the quantities. For example the geometric mean of 100, 200, and 300 is  $(100 \times 200 \times 300)^{1/3} = 181.7$ .
- g. When only one sample is collected, the effluent limit cannot be exceeded. If ten or more samples are collected during the monthly reporting period, not more than 10% of the samples may exceed the effluent limit.
- h. Monitoring required once per month only during the time period May-September. When an E. coli sample is taken, a FC sample must be taken concurrently.
- i. Monitoring to be conducted at the same time as monitoring for ammonia.
- j. Monitoring to be conducted a minimum of 60 days apart during the time period June 1 – September 30.

*(Table 3: Outfall 001A: Effluent Limits and Monitoring Requirements (October 1 - May 31)  
continued on the following page.)*

**Table 3: Outfall 001A: Effluent Limits and Monitoring Requirements (October 1 - May 31)**

Parameter	Effluent Limits					Monitoring Requirements		
	Units <sup>a</sup>	Daily Minimum	Monthly Average	Weekly Average	Daily Maximum	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	mgd	N/A	Report	N/A	2.5	Effluent	Continuous	Recorded
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	N/A	30	45	60	Influent and Effluent <sup>b</sup>	1/Week	24-hour Composite <sup>c</sup>
	lbs/day <sup>d</sup>		625	938	1,251			Calculated
Total Suspended Solids (TSS)	mg/L	N/A	30	45	60	Influent and Effluent	1/Week	24-hour Composite
	lbs/day		625	938	1,251			Calculated
BOD <sub>5</sub> & TSS Minimum Percent (%) Removal	%	N/A	85 <sup>e</sup>	N/A	N/A	Influent and Effluent	1/Month	Calculated
Fecal coliform Bacteria (FC)	FC/100 mL	N/A	20 <sup>f</sup>	N/A	40 <sup>g</sup>	Effluent	1/Week	Grab
pH	SU	6.5	N/A	N/A	8.5	Effluent	5/Week	Grab
Temperature	° C	N/A	N/A	N/A	Report	Effluent	5/Week	Grab
Dissolved Oxygen (DO)	mg/L	Report	N/A	N/A	N/A	Effluent	1/Month	Grab
Total Dissolved Solids (TDS)	mg/L	N/A	N/A	N/A	Report	Effluent	2/Period <sup>j</sup>	24-hour Composite
Cyanide, as free cyanide	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	Grab
Mercury	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	Grab
Copper, total recoverable	mg/L	N/A	N/A	N/A	0.025	Effluent	2/Period	24-hour Composite
	lbs/day	N/A	N/A	N/A	0.52			Calculated
Lead, total recoverable	mg/L	N/A	N/A	N/A	0.018	Effluent	2/Period	24-hour Composite
	lbs/day	N/A	N/A	N/A	0.37			Calculated
Zinc, total recoverable	µg/L	N/A	N/A	N/A	Report	Effluent	2/Period	24-hour Composite
<i>Escherichia coli</i> ( <i>E. coli</i> )	cfu/100 mL	N/A	126 <sup>f</sup>	N/A	410 <sup>g</sup>	Effluent	1/Month <sup>h</sup>	Grab
Total Nitrate/Nitrite, as N	mg/L	N/A	44.9	N/A	66.9	Effluent	1/Month <sup>i</sup>	24-hour Composite
	lbs/day	N/A	936	N/A	1,385			Calculated
Total Ammonia, as N	mg/L	N/A	4.7	N/A	11.5	Effluent	1/Month	24-hour Composite
	lbs/day	N/A	98	N/A	240			Calculated

## Footnotes:

- a. Units: mgd = million gallons per day, mg/L = milligrams per liter, lbs/day = pounds per day [(design flow in million gallons per day (mgd)) x (concentration in mg/L) x 8.34], FC/100 mL = Fecal Coliform per 100 milliliters, SU= standard units, °C= degrees Celsius, µg/L = micrograms per liter, cfu/100 mL = colony forming units per 100 milliliters.
- b. Limits apply to effluent. Report average monthly influent concentration. Influent and effluent composite samples shall be collected during the same hour period.
- c. See APPENDIX C for definition.
- d. lbs/day = concentration (mg/L) x flow (mgd) x 8.34 (conversion factor).



- e. Minimum % Removal = [(monthly average influent concentration in mg/L – monthly average effluent concentration in mg/L) / (monthly average influent concentration in mg/L x 100). The monthly average percent removal must be calculated using the arithmetic mean of the influent value and the arithmetic mean of the effluent value for that month.
- f. If more than one FC bacteria or E. coli sample is collected within the reporting period, the average result must be reported as the geometric mean.  
When calculating the geometric mean, replace all results of zero, 0, with a one, 1. The geometric mean of “n” quantities is the “nth” root of the product of the quantities. For example the geometric mean of 100, 200, and 300 is  $(100 \times 200 \times 300)^{1/3} = 181.7$ .
- g. When only one sample is collected, the effluent limit cannot be exceeded. If ten or more samples are collected during the monthly reporting period, not more than 10% of the samples may exceed the effluent limit.
- h. Monitoring required once per month only during the time period May-September. When an E. coli sample is taken, a FC sample must be taken concurrently.
- i. Monitoring to be conducted at the same time as monitoring for ammonia.
- j. Monitoring to be conducted a minimum of 120 days apart during the time period October 1 – May 31.

### 1.3 Whole Effluent Toxicity (WET) Testing Requirements

- 1.3.1 The permittee must conduct chronic toxicity WET tests on the 24-hour composite effluent samples from Outfall 001A. Testing shall be conducted in accordance with Sections 1.3.2 through 1.3.8.
- 1.3.2 The permittee shall commence annual testing within the first calendar year after the effective date of this permit. The annual testing shall alternate seasons as defined in Permit Section 1.2 Table 2 and Table 3 (June 1 – September 30 and October 1 – May 31). If a yearly test is taken between June 1 and September 30, the next yearly sampling shall be done between October 1 and May 31.

#### 1.3.3 Chronic Test Species and Methods

- 1.3.3.1 During the first year of discharge, permittees must conduct short-term tests with the water flea, *Ceriodaphnia dubia*, (survival and reproduction test) and the fathead minnow, *Pimephales promelas*, (larval survival and growth test). For all subsequent tests, testing shall be conducted using the more sensitive species. If no toxicity is observed in the chosen species, testing shall be conducted on *Pimephales promelas*.
- 1.3.3.2 If the permittee proposes an alternative species to be used for chronic toxicity testing, the permittee shall perform screening first and provide the results of the screening to DEC Permitting for review and written approval prior to implementing the use of the new test species.
- 1.3.3.3 Presence of chronic toxicity must be estimated as specified in [\*Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms\*](#), Fourth Edition (EPA/821-R-02-013, October 2002).
- 1.3.3.4 Results must be reported in TUc where TUc=100/no observed effect concentration (NOEC). See Appendix C for a definition of NOEC

#### 1.3.4 Quality Assurance

- 1.3.5 The toxicity testing on each organism for each season shall include a series of five test dilutions and a control. The series must include the instream waste concentration (IWC), two dilutions above the IWC, and two dilutions below the IWC. No concentration shall be greater than two times that of the next lower concentration. The IWC is the concentration of the effluent at the boundary of the mixing zone. The IWC for this discharge during winter is estimated at 6.3 % effluent and the IWC for this discharge during summer is estimated at 5.1%. There are no chronic toxicity effluent limits for this discharge.

- 1.3.5.1 For winter, the chronic toxicity trigger is defined as 15.9 TUC corresponding to receiving water dilution of 6.3%.
- 1.3.5.2 For summer, the chronic toxicity trigger is defined as 19.6 TUC corresponding to receiving water dilution of 5.1%.
- 1.3.5.3 All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with [\*Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition\*](#), (EPA/821-R-02-013, October 2002) and individual test protocols.
- 1.3.5.4 In addition to those quality assurance measures specified in methodology, quality assurance procedures must be followed:
  - 1.3.5.4.1 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 last 5 months of reference toxicity testing. Where organisms are cultured by the testing laboratory, monthly reference toxicant testing is sufficient
  - 1.3.5.4.2 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 within 14 days of receipt of the test results.
  - 1.3.5.4.3 To the extent practicable, control and dilution water should be receiving water. If the dilution water used is different from the culture water, a second control using culture water shall also be used. For purpose of this paragraph, “receiving water” means water collected from Eagle River upstream from the permittee’s discharge. In no case shall water that has not met test acceptability criteria be used as dilution water.

### 1.3.6 Accelerated Testing

- 1.3.6.1 If toxicity is greater than 15.9 TUC in any test between October 1 and May 31, the permittee shall conduct four biweekly tests over a 8-week period. Accelerated testing must be initiated within two weeks of receipt of test results that indicate exceedance.
- 1.3.6.2 If toxicity is greater than 19.6 TUC in any test between June 1 and September 30, the permittee shall conduct four biweekly tests over a 8-week period. Accelerated testing must be initiated within two weeks of receipt of test results that indicate exceedance.
- 1.3.6.3 **Initial Investigation:** If the permittee demonstrates through an evaluation of facility operations that the cause of the exceedance is known and corrective actions have been implemented, only one accelerated test is necessary.
- 1.3.6.4 The permittee must notify DEC of the exceedance in writing with two weeks of receipt of the test results. The notification must include the following information:
  - 1.3.6.4.1 A status report on any actions required by the permit, with a schedule for actions not yet completed;
  - 1.3.6.4.2 A description of any additional actions the permittee has taken or will take to investigate and correct the cause(s) of the toxicity, and;
  - 1.3.6.4.3 Where no actions have been taken, a discussion of the reasons for taking no action;

- 1.3.6.5 If none of the accelerated tests indicates toxicity greater than 15.9 TUC between October 1 and May 31, the permittees may return to the normal testing frequency.
- 1.3.6.6 If none of the accelerated tests indicates toxicity greater than 19.6 TUC between June 1 and September 30, the permittees may return to the normal testing frequency.
- 1.3.6.7 If toxicity is greater than 15.9 TUC in any of the accelerated tests between October 1 and May 31, the permittees must initiate a toxicity reduction evaluation (TRE) as outlined in Section 1.3.7 within 15 days of the exceedance.
- 1.3.6.8 If toxicity is greater than 19.6 TUC in any of the accelerated tests between June 1 and September 30, the permittees must initiate a toxicity reduction evaluation (TRE) as outlined in Section 1.3.7 within 15 days of the exceedance.
- 1.3.6.9 If the permittees are able to adequately demonstrate through an evaluation of facility operations that the cause of the exceedance(s) is known and corrective actions have been immediately implemented, or in cases where additional test quality assurance or quality control is necessary, only one accelerated test is necessary. If toxicity is greater than 15.9 TUC in the October 1 through May 31 or 19.6 TUC in the June 1 through September 30 test, then TRE requirements in Section 1.3.7 shall apply

#### **1.3.7 Toxicity Reduction Evaluation and Toxicity Identification Evaluation**

- 1.3.7.1 If toxicity is greater than 15.9 TUC between October 1 and May 31 or 19.6 TUC in any of the accelerated tests between June 1 and September 30, the permittees shall initiate a TRE in accordance with [Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants](#) (EPA/833-B-99-002, August 1999). The permittee will develop a more detailed TRE workplan as expeditiously as possible. At a minimum, the workplan shall include:
  - 1.3.7.1.1 Further actions to investigate and identify the cause of toxicity;
  - 1.3.7.1.2 Actions the permittee will take to mitigate the impact of the discharge and to prevent recurrence of toxicity; and
  - 1.3.7.1.3 A schedule for these actions.
- 1.3.7.2 If a TRE is initiated before completion of accelerated testing, the accelerated testing schedule may be terminated or used as necessary in performing the TRE.
- 1.3.7.3 The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of the TRE process. Any TIE must be performed in accordance with EPA guidance manuals: [Toxicity Identification Evaluation; Characterization of Chronically Toxic Effluents, Phase I](#) (EPA/600/6-91/005F, 1992); [Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity](#) (EPA/600R-92/080, 1993); and [Methods for Aquatic Toxicity Identification Evaluations, Phase III: Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity](#) (EPA-600/R-92/081, 1993).

#### **1.3.8 Reporting**

- 1.3.8.1 The permittee shall submit the results of the toxicity tests with the DMR following the month in which the results are received.

- 1.3.8.1.1 If applicable, a full accelerated testing report must be submitted within four weeks of receipt of the final testing results from the laboratory.
- 1.3.8.1.2 If toxicity is greater than 15.9 TUC in any test, a copy of the more detailed TRE workplan as required in Permit Section 1.3.7 must be submitted as an attachment with the DMR for the month following completion of the workplan.
- 1.3.8.1.3 If an initial investigation identifies the source of toxicity and accelerated testing is unnecessary, the result of the investigation must be submitted as an attachment with the DMR for the month following completion of the investigation.
- 1.3.8.1.4 The dates of sample collection and initiation of each toxicity test;
- 1.3.8.1.5 The toxicity test report results must include all relevant information outlined in Section 10, [Report Preparation of Short-Term Methods for Estimating the Chronic Toxicity of Freshwater Organisms](#) (EPA/821-R-02-013, October 2002).

#### **1.4 Mixing Zone**

- 1.4.1 In accordance with state regulations at 18 AAC 70.240, separate summer and winter mixing zones for total nitrate/nitrite, zinc, dissolved oxygen, copper, lead, temperature, total dissolved solids, and WET are authorized in Eagle River for the discharge.

##### **1.4.2 Size**

- 1.4.2.1 During summer conditions, from June 1 through September 30, the following mixing zone sizes and dilution factor are authorized for the parameters listed in Section 1.4.1.
  - 1.4.2.1.1 The chronic mixing zone for the discharge for total nitrate/nitrite has a dilution factor of 5.1:1 and is defined as the area extending downstream from the end of the outfall line with a length of 76 feet and a width of 8.5 feet.
  - 1.4.2.1.2 The acute mixing zone for the discharge for zinc has a dilution factor of 2.4:1 and is defined as the area extending downstream from the end of the outfall line with a length of 15 feet and a width of 4 feet.
- 1.4.2.2 During winter conditions, from October 1 through May 31, the following mixing zone sizes and dilution factors are authorized for the parameters listed in Section 1.4.1.
  - 1.4.2.2.1 The chronic mixing zone for the discharge for total nitrate/nitrite has a dilution factor of 6.3:1 and is defined as the area extending downstream from the end of the outfall line with a length of 1188 feet and a width of 31 feet.
  - 1.4.2.2.2 The acute mixing zone for the discharge for temperature has a dilution factor of 1.3:1 and is defined as the area extending downstream from the end of the outfall line with a length of 1 foot and a maximum width of 2 feet.

#### **1.5 Receiving Waterbody Monitoring**

- 1.5.1 The permittee must conduct receiving water monitoring as specified in Table 4. Monitoring must be at an upstream location in the Eagle River that is above the influence of Outfall 001A.
- 1.5.2 Monitoring results must be submitted with the application for permit reissuance.

**Table 4: Receiving Waterbody Monitoring Requirements**

Parameter	Units a	Sample Frequency	Sample Type
pH	SU	Twice per season b	Grab
Temperature	° C	Twice per season b	Grab
Hardness as CaCO <sub>3</sub>	mg/L	Twice per season b	Grab
Footnotes: a. Units: SU= standard units, °C= degrees Celsius, mg/L = milligrams per liter, b. Summer season: June 1 – September 30; Winter season: October 1 – May 31.			

## 1.6 Additional Monitoring

### 1.6.1 Design Flow Greater Than 0.1 MGD

- 1.6.1.1 The permittee shall perform the additional effluent testing in the Alaska Pollutant Discharge Elimination System (APDES) Application Form 2A, Section 11 as well as all applicable supplemental monitoring listed in Section 12. The permittee shall submit the results of the additional testing with their application for reissuance of this APDES permit. The permittee shall consult and review Form 2A, Section 11 upon permit issuance to ensure that the required monitoring in the application will be completed prior to submitting a request for permit reissuance.
- 1.6.1.2 The permittee shall perform effluent monitoring three times in the first four and one half years of the permit term. Each monitoring event shall be conducted in a different calendar year and in a different season. Monitoring for the parameters contained in this permit may be used to satisfy this specific monitoring requirement as long as the “different calendar year and season” criteria as described in Form 2A are met.
- 1.6.1.3 The permittee is responsible for all submissions and activities required on application Form 2A, even if not summarized here.

## 2.0 SPECIAL CONDITIONS

### 2.1 Quality Assurance Project Plan

- 2.1.1 Within 180 days of the effective date of the permit, the permittee shall review, update as necessary, and implement a QAPP for all monitoring required by this permit.
- 2.1.2 The QAPP must be designed to assist in planning for the collection and analysis of all samples in support of the permit and to help explain data anomalies whenever they occur.
- 2.1.3 The QAPP shall be retained electronically or physically onsite and made available to DEC upon request.
- 2.1.4 Throughout all sample collection and analysis activities, the permittee must use DEC-approved Quality Assurance/Quality Control and chain-of-custody procedures, as described in the *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5, March 2001) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5, December 2002) The QAPP must be prepared in the format specified in these documents.

2.1.5 At a minimum, a QAPP must include:

- 2.1.5.1 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;
  - 2.1.5.2 Maps indicating the location of each sampling point;
  - 2.1.5.3 Qualification and training of personnel; and
  - 2.1.5.4 Specifications for the collection and analysis of quality assurance samples for each sampling event, including matrix spiked and duplicate samples and analysis of field blanks (sample blanks); and
  - 2.1.5.5 Name, address, and telephone number of all laboratories used by or proposed to be used by the permittee.
- 2.1.6 The permittee must amend the facility specific QAPP whenever sample collection, sample analysis, or other procedure addressed by the QAPP is modified.
- 2.1.7 The QAPP must be reviewed annually. Documentation of annual plan review by the permittee shall be retained onsite and made available to DEC upon request.

## 2.2 Operation and Maintenance Plan

- 2.2.1 In addition to requirements specified in Appendix A, Section 1.6 of this permit (Proper Operation and Maintenance), within 180 days of the effective date of this permit, the permittee shall review and update as necessary, the Eagle River WWTF O&M Plan
- 2.2.2 The O&M Plan shall be retained electronically or physically on site and made available to DEC upon request.
- 2.2.3 The O&M Plan must be reviewed annually. Documentation of annual plan review by the permittee shall be retained onsite and made available to DEC upon request.
- 2.2.4 The O&M Plan must include appropriate BMPs which prevent or minimize potential for the release of pollutants to the Eagle River.
- 2.2.5 The permittee must develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities of controls in the O&M Plan must reflect identified potential sources of pollutants at the facility. The description of BMPs must address to the extent practicable, the following minimum components:
- 2.2.5.1 Spill prevention and control;
  - 2.2.5.2 Optimization of chemical usage;
  - 2.2.5.3 Preventative maintenance program;
  - 2.2.5.4 Minimization of pollutant inputs from industrial users;
  - 2.2.5.5 Research, development and implementation of a public information and education program to control the introduction of household hazardous materials to the sewer system; and
  - 2.2.5.6 Water conservation.

## 2.3 Industrial User Survey

- 2.3.1 A list of those industries or businesses that discharge and/or have the potential to discharge (i.e. a spill to the collection system) non-domestic wastewater to Eagle River WWTF collection system must be submitted with Form 2A when applying for permit reissuance.
- 2.3.2 The industries or businesses should be categorized as significant industrial user (SIU) or minor industrial user (MIU). See Appendix C for definitions of these categories.
- 2.3.3 The list must include the following:
  - 2.3.3.1 The business name and address
  - 2.3.3.2 A description of the non-domestic process including products manufactured or services performed and potential pollutants
  - 2.3.3.3 The Standard Industrial Classification (SIC) <https://siccode.com/sic-code-lookup-directory> or North American Industry Classification System (NAICS) <https://www.naics.com/complete-naics-business-resource-list/> code(s) for each activity type
  - 2.3.3.4 Estimate of non-domestic wastewater discharged into the facility's wastewater treatment collection system in gallons per day and whether the discharge is continuous or intermittent
- 2.3.4 Those industries or businesses that are not connected to the collection system or that solely discharge domestic equivalent wastewater are not considered sources of non-domestic wastewater and may be excluded from the list that is submitted to DEC. However, a list of the domestic equivalent industries or businesses should be maintained by Eagle River WWTF and made available to DEC upon request.
- 2.3.5 For domestic equivalents, the list should include the following:
  - 2.3.5.1 The business name and address.
  - 2.3.5.2 A description of products manufactured, or services performed and potential pollutants.
- 2.3.6 DEC may request additional information regarding wastewater contributions from specific industries or businesses in order to verify categorization as an SIU, MIU, or domestic equivalent, and to determine whether a pretreatment program should be developed and/or or if pretreatment requirements should be included in Eagle River WWTF's wastewater discharge permit.

## 2.4 Electronic Reporting (E-Reporting) Rule

2.4.1 E-Reporting Rule for DMRs (Phase I). The permittee must submit DMR data electronically through Network Discharge Monitoring Report (NetDMR) per Phase I of the e-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into the NetDMR Portal (<https://cdx.epa.gov/>). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g. mixing zone receiving water data, etc), shall be included as an attachment to the NetDMR submittal. DEC has established an e-Reporting Information website at <https://dec.alaska.gov/water/compliance/electronic-reporting-rule> that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at [https://usepa.servicenow.com/oeca\\_icis?id=netdmr\\_homepage](https://usepa.servicenow.com/oeca_icis?id=netdmr_homepage)

2.4.2 E-Reporting Rule for Other Reports (Phase II). Phase II of the E-Reporting rule integrates electronic reporting for all other reports required by the Permit (e.g., Annual Reports and Certifications). All wastewater permit required submissions (e.g., Notices of Intent (NOI's), Notice of Terminations (NOT), Annual Reports, Noncompliance Notification, and Corrective Action reports are to be submitted electronically through DEC's Environmental Data Management System (EDMS, accessible via <https://dec.alaska.gov/water/edms>), unless prior approval has been obtained from DEC for an alternative means.

2.5 **Identification Sign(s)** At least one sign must be posted on the shoreline near the discharge area of Outfall 001A during discharge. Signs must inform the public that secondary treated domestic wastewater is being discharged, state that there is a mixing zone and describe it, warn users of the area that certain activities such as the harvesting of aquatic life for raw consumption and bathing should not take place in the mixing zone, and provide the phone number and identity of the discharger.

2.6 **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.



# Appendix A – Standard Conditions: APDES Individual Permit – Publicly Owned Treatment Works

## TABLE OF CONTENTS

1.0	Standard Conditions Applicable to All Permits .....	A-1
1.1	Contact Information and Addresses .....	A-1
1.2	Duty to Comply .....	A-1
1.3	Duty to Reapply .....	A-2
1.4	Need to Halt or Reduce Activity Not a Defense .....	A-2
1.5	Duty to Mitigate .....	A-2
1.6	Proper Operation and Maintenance .....	A-2
1.7	Permit Actions .....	A-2
1.8	Property Rights .....	A-2
1.9	Duty to Provide Information .....	A-2
1.10	Inspection and Entry .....	A-2
1.11	Monitoring and Records .....	A-3
1.12	Signature Requirement and Penalties .....	A-4
1.13	Proprietary or Confidential Information .....	A-5
1.14	Oil and Hazardous Substance Liability .....	A-6
1.15	Cultural and Paleontological Resources .....	A-6
1.16	Fee .....	A-6
1.17	Other Legal Obligations .....	A-6
2.0	Special Reporting Obligations .....	A-6
2.1	Planned Changes .....	A-6
2.2	Anticipated Noncompliance .....	A-6
2.3	Transfers .....	A-7
2.4	Compliance Schedules .....	A-7
2.5	Corrective Information .....	A-7
2.6	Bypass of Treatment Facilities .....	A-7
2.7	Upset Conditions .....	A-8
2.8	Notice of New Introduction of Pollutants .....	A-8
3.0	Monitoring, Recording, and Reporting Requirements .....	A-8
3.1	Representative Sampling .....	A-8
3.2	Reporting of Monitoring Results .....	A-9
3.3	Additional Monitoring by Permittee .....	A-9
3.4	Twenty-four Hour Reporting .....	A-9
3.5	Other Noncompliance Reporting .....	A-10
4.0	Penalties for Violations of Permit Conditions .....	A-10
4.1	Civil Action .....	A-10
4.2	Injunctive Relief .....	A-11
4.3	Criminal Action .....	A-11
4.4	Other Fines .....	A-11

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](mailto: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](mailto: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.
- 1.6.3 In accordance with 18 AAC 72.065, the owner of operator of a domestic system that has 100 or more service connections or that is used, or intended for use, by 500 or more people per day shall ensure that the system is operated by a person certified under 18 AAC 74.

### **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 Notice of New Introduction of Pollutants**

2.8.1 Any POTW shall provide adequate notice to the Department, including information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW as soon as the POTW has knowledge of a change, but no later than seven days in advance of any:

2.8.1.1 New introduction of pollutants into the POTW from an indirect discharger if that introduction of pollutants would be subject to 33 U.S.C 1311 or 33 U.S.C 1316 if the POTW directly discharged those pollutants, and

2.8.1.2 Substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

2.8.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

## **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](mailto: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 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://dec.alaska.gov/commish/regulations/>

40 CFR	Code of Federal Regulations Title 40: Protection of Environment
AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
APDES	Alaska Pollutant Discharge Elimination System
AS	Alaska Statutes
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at <a href="https://www.akleg.gov/basis/statutes.asp#46">https://www.akleg.gov/basis/statutes.asp#46</a>
BOD <sub>5</sub>	5- day Biochemical Oxygen Demand
BMP	Best Management Practice
CBOD <sub>5</sub>	5-day Carbonaceous Biochemical Oxygen Demand
CIU	Categorical Industrial User
CFR	Code of Federal Regulations
CWA	Clean Water Act
DML	Daily Maximum Limit
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
EPA	U.S. Environmental Protection Agency
FC	Fecal Coliform
GPD or gpd	Gallons per day
Hg	Mercury
IC <sub>25</sub>	Inhibition Concentration 25%
I/I	Infiltration and Inflow

IPP	Industrial Pretreatment Program
LC <sub>50</sub>	Lethal Concentration 50%
LOQ	Limit of Quantification
MDL	Method Detection Limit
mg/L	Milligrams per Liter
ML	Minimum Level
MLLW	Mean Lower Low Water
N/A	Not Applicable
Ni	Nickel
NOEC	No Observed Effect Concentration
POTW	Publicly Owned Treatment Works
PQL	Practical Quantification Limit
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QC	Quality Control
RL	Reporting Limit
RWC	Receiving Water Concentration
SIU	Significant Industrial User
SU	Standard Units
TIE	Toxicity Identification Evaluation
TRC	Total Residual Chlorine
TRE	Toxicity Reduction Evaluation
TSS	Total Suspended Solids
TU <sub>c</sub>	Toxic Unit, Chronic
µg/L	Micrograms per Liter
U.S.C.	United States Code
WET	Whole Effluent Toxicity
WQS	Water Quality Standards
WWTF	Wastewater Treatment Facility

## 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**<sup>a</sup> – Means the Administrator of the EPA or an authorized representative.

**Alaska Pollutant Discharge Elimination System (APDES)**<sup>a</sup> – 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.

**Aquaculture**<sup>b</sup> – 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 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 for that month.

**Biochemical Oxygen Demand (BOD)**<sup>c</sup> – Means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20° C.

**Bypass**<sup>a</sup> – Means the intentional diversion of waste streams from any portion of a treatment facility.

**Clean Water Act (CWA)**<sup>a</sup> – 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.

**Commissioner**<sup>a</sup> – 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*.

---

<sup>a</sup> See 18 AAC 83

<sup>b</sup> See 18 AAC 70.990

<sup>c</sup> See 18 AAC 72.990

**Criterion<sup>b</sup>** – 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<sup>a</sup>** – 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.

**Department<sup>a</sup>** – Means the Alaska Department of Environmental Conservation.

**Design Flow<sup>a</sup>** – Means the wastewater flow rate that the plant was designed to handle.

**Director<sup>a</sup>** – 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<sup>a</sup>** – When used without qualification, discharge means the discharge of a pollutant.

**Discharge of a Pollutant<sup>a</sup>** – 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)<sup>b</sup>** – 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.

**Domestic Equivalent** – Means businesses that only discharge pollutants similar in nature to domestic wastewater that is discharged from residential dwellings, and that do not otherwise qualify as an SIU or an MIU as defined in this glossary. This definition is intended for use when categorizing industries and businesses, and not intended to be used as a general APDES definition.

**Domestic Wastewater<sup>c</sup>** – 18 AAC 72.72.990(23) “domestic wastewater” 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; “domestic wastewater” does not include (A) liquid or solid material removed from a septic tank, cesspool, or similar treatment works, if those facilities receive nondomestic or industrial wastewater; or (B) grease removed from a grease trap at a restaurant.



**Effluent**<sup>b</sup> – 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.

**Fecal Coliform (FC)**<sup>b</sup> – Bacteria that can ferment lactose at  $44.5^{\circ} + 0.2^{\circ}\text{C}$  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  $24 \pm 2$  hours of incubation at  $44.5^{\circ} + 0.2^{\circ}\text{C}$  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  $N^{\text{th}}$  root of the product of  $N$ . All sample results of zero will use a value of 1 for calculation of the geometric mean.

Example geometric mean calculation:  $\sqrt[4]{(12 \times 23 \times 34 \times 990)} = 55$

**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% (IC<sub>25</sub>)**<sup>d</sup> – Means the point estimate of the toxicant concentration that would cause 25% reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

**Lethal Concentration 50% (LC<sub>50</sub>)** – Means the toxicant concentration that would cause death in 50% of the test organisms.

**Maximum Daily Limit**<sup>a</sup> – Means the highest allowable “daily discharge”.

**Mean**<sup>b</sup> – 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**<sup>b</sup> – 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.

---

<sup>d</sup> See EPA Technical Support Document

**Method Detection Limit (MDL)** <sup>c</sup> – 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)** <sup>b</sup> – 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)** <sup>b</sup> – 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)** <sup>d</sup> – 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.

**Minor Industrial User (MIU)** – Means businesses that do not qualify as SIUs according to the SIU definition, but who still either have some discharges of wastewater containing pollutants not typical of domestic wastewater, and potentially of concern to the POTW, or have a potential to discharge or spill chemicals to the POTW which could impair the normal operation of the POTW, adversely affect worker health or safety, or violate Alaska Water Quality Standards (18 AAC 70). This definition is intended for use when categorizing industries and businesses, and not intended to be used as a general APDES definition.

**Mixing Zone** <sup>b</sup> – Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water.

**Month** – Means the time period from the 1<sup>st</sup> 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)** <sup>d</sup> – 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.

---

<sup>c</sup> See 40 CFR Part 136

**pH<sup>f</sup>** – 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.

**Pollutant<sup>a</sup>** – 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.

**Primary Contact Recreation** – 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.

**Priority Pollutants** – Means the set of chemical pollutants that EPA regulates and for which EPA has published analytical test methods. A list of the Priority Pollutants can be found in Appendix A to 40 CFR Part 423.

**Principal Executive Officer<sup>a</sup>** – 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.

**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 Waterbody** – 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.

**Reporting Limit** – Minimum concentration of a given parameter that can be reliably measured and reported by a laboratory using a particular analytical method. A reporting limit is greater than or equal to a method detection limit and is typically set by a laboratory.

**Residual Chlorine** – Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.

---

<sup>f</sup> See EPA Permit Writer’s Manual

- Responsible Corporate Officer**<sup>a</sup> – 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**<sup>b</sup> – 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.
- Significant Industrial User (SIU)**<sup>f</sup> – Means all industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, subchapter N; and any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW Treatment plant; or is designated as such by the control authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).
- 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)**<sup>f</sup> – 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)**<sup>d</sup> – 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).
- Twice per year** – Means two time periods during the calendar year: October through April and May through September.
- Upset**<sup>a</sup> – 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.
- Waters of the United States or Waters of the U.S.** – Has the meaning given in 18 AAC 83.990(77).

**Water Supply**<sup>b</sup> – 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.