United States Environmental Protection Agency Region 10 1200 Sixth Avenue, Suite 155 Seattle, Washington 98101-3188

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act (CWA or the Act), 33 USC 1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4

City and Borough of Wrangell Wrangell, Alaska

is authorized to discharge from the Wrangell Wastewater Treatment Plant located in Wrangell, Alaska at the following location(s):

Outfall	Receiving Water	Latitude	Longitude
001	Zimovia Straight	56.452846	-132.391678

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective November 1, 2025.

This permit and the authorization to discharge shall expire at midnight, October 31, 2030.

The Permittee shall reapply for a permit reissuance on or before May 6, 2030, 180 days before the expiration of this permit if the Permittee intends to continue operations and discharges at the facility beyond the term of this permit.

/signed/ 12/5/2024

Susan Poulsom
Branch Manager, Acting
Permits, Drinking Water, and Infrastructure

This permit modification is effective on July 24, 2025 Signed this 24th day of July, 2025

/signed/ 7/24/25

Susan Poulsom
Branch Manager
Permits, Drinking Water, and Infrastructure

SCHEDULE OF SUBMISSIONS

The following is a summary of some of the items the Permittee must complete and/or submit to EPA during the term of this permit:

Item	Due Date
Discharge Monitoring Reports (DMR)	DMRs are due monthly and must be submitted via NetDMR on or before the 15 th of the month following the monitoring period (See Permit Part III.B).
Quality Assurance Plan (QAP)	The Permittee must provide EPA written notification that the Plan has been developed and implemented within 180 days after the effective date of the final permit (see Permit Part II.B.). The Plan must be kept on site and made available to EPA and ADEC upon request.
Operation and Maintenance (O&M) Plan	The Permittee must provide EPA written notification that the Plan has been developed and implemented within 180 after the effective date of the final permit. (See Permit Part II.A.). The Plan must be kept on site and made available to EPA and ADEC upon request.
NPDES and 301(h) Application Renewal	The application must be submitted at least 180 days before the expiration date of the permit (See Permit Part V.B.). The renewal application must include a completed <i>Applicant Questionnaire for Modification of Secondary Treatment Requirements</i> , included as the Appendix to Subpart G of 40 CFR 125.
Surface Water Monitoring Report (SWMRP)	The Permittee must submit the receiving water sampling results in a SWMRP annually by March 31 of the following year as an attachment to NetDMR, and with the NPDES and 301(h) Application Renewal (See Permit Part I.D.).
Biological Monitoring Report (BMR)	The Permittee must submit the results of the benthic survey and sediment analysis in a DNR by March 31 of the following year as an attachment to NetDMR, and with the NPDES and 301(h) Application Renewal (See Permit Part I.E.).
Toxics Control Program - Chemical Analysis and Source Identification	The Permittee must submit the results of the chemical analysis and source identification in Permit Part II.D.1 annually by March 31 of the following year as an attachment to NetDMR, and with the NPDES and 301(h) Application Renewal (See Permit Part II.D.1.c.).
Industrial User Survey or Certification of No Industrial Sources	The Permittee must submit a list of industrial users or a new certification of no industrial sources of toxics with the NPDES and 301(h) Application Renewal (See Permit Parts II.D.2.d. and II.D.2.h.).
Nonindustrial Source Control Program	The Permittee must submit an annual report on the nonindustrial source control program by March 31 of the following year (See Permit Part II.D.3.b.).

Compliance Schedule	See Permit Part II.C.
Twenty-Four Hour Notice of Noncompliance Reporting	The Permittee must report certain occurrences of noncompliance by telephone within 24 hours from the time the Permittee becomes aware of the circumstances (See Permit Part I.B.3. and Permit Part III.G.).
Emergency Response and Public Notification Plan	The Permittee must develop and implement an overflow emergency response and public notification plan. The Permittee must submit written notice to EPA that the plan has been developed and implemented within 180 days of the effective date of this permit (See Permit Part II.F.).

Table of Contents

Sch	edu	le of Submissions	3
l.	Lin	nitations and Monitoring Requirements	7
	A.	Discharge Authorization	7
	B.	Effluent Limitations and Monitoring	
	C.	Whole Effluent Toxicity (WET) Testing Requirements	. 11
	D.	Receiving Water Monitoring	
	E.	Biological Monitoring for Benthic Infauna	. 19
II.	Sp	ecial Conditions	. 20
	Α.	Operation and Maintenance Plan (O&M Plan)	. 20
	В.		
	C.	Fecal Coliform and Enterococcus Schedule of Compliance	
	D.	Toxics Control Program	
	E.	Interim Beach Advisory	
	F.	Emergency Response and Public Notification Plan	. 28
III.	Мо	nitoring, Recording, and Reporting Requirements	. 29
	A.	Representative Sampling (Routine and Non-Routine Discharges)	. 29
	B.	Reporting of Monitoring Results	
	C.	Monitoring Procedures	. 30
	D.	Additional Monitoring by Permittee	. 30
	E.	Records Contents	. 30
	F.	Retention of Records	. 30
	G.	Twenty-four Hour Notice of Noncompliance Reporting	
	Н.	Other Noncompliance Reporting	
	I.	Public Notification	
	J.	Notice of New Introduction of Toxic Pollutants	. 33
IV.	Co	mpliance Responsibilities	. 34
	A.	Duty to Comply	. 34
	B.	Penalties for Violations of Permit Conditions	. 34
	C.	Need to Halt or Reduce Activity not a Defense	. 36
	D.	Duty to Mitigate	. 36
	E.	Proper Operation and Maintenance	. 36
	F.	Bypass of Treatment Facilities	. 36
	G.	Upset Conditions	
	Н.	Toxic Pollutants	
	I.	Planned Changes	
	J.	Anticipated Noncompliance	
	K.	Reopener	
٧.	Ge	neral Provisions	. 39
	A.	Permit Actions	
	B.	Duty to Reapply	
	C.	Duty to Provide Information	
	D.	Other Information	. 39

	E.	Identification of the Initial Recipient for NPDES Electronic Reporting Data	. 39
	F.	Signatory Requirements	. 39
	G.	Availability of Reports	. 41
		Inspection and Entry	
	l.	Property Rights	
	J.	Transfers	
		State Laws	
VI.	Re	ceiving Water Monitoring Maps	. 43
	Fig	ure 1	.43
	Fig	ure 2	.44
VII.		initions	
Арр	end	x A: Minimum Levels	. 48
		x B: PFAS Chemicals To Be Analyzed	

I. LIMITATIONS AND MONITORING REQUIREMENTS

A. Discharge Authorization

During the effective period of this permit, the Permittee is authorized to discharge pollutants from the outfalls specified herein to Zimovia Straight, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

 The Permittee must limit and monitor discharges from Outfall 001 as specified in Table 1 below. All figures represent maximum effluent limits unless otherwise indicated. The Permittee must comply with the effluent limits at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

Table 1 - Effluent Limitations and Monitoring Requirements								
		Ef	fluent Limitat	tions	Моі	nitoring Require	ements	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Sample Location	Sample Frequency	Sample Type	
	Parar	meters with	Effluent Limit	s and Monitor	ing Requirer	nents		
Total Flow	mgd	0.6		3.0	Effluent	Continuous	Recorded	
BOD ₅	mg/L	120	200		Influent and	1/month	24-hour composite	
-	lbs/day	601	1001		Effluent		Calculation ¹	
BOD ₅ Percent Removal	%	≥30			Influent and Effluent	1/month	Calculation ²	
TSS	mg/L	30	45		Influent and	1/month	24-hour composite	
	lbs/day	150	225		Effluent		Calculation ¹	
TSS Percent Removal	%	≥30			Influent and Effluent	1/month	Calculation ²	
рН	std. units	В	Between 6.5 – 8.5			1/week	Grab or Meter	

Table 1 - Effluent Limitations and Monitoring Requirements								
		Eff	fluent Limitat	tions	Monitoring Requirements			
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Sample Location	Sample Frequency	Sample Type	
Dissolved Oxygen	mg/L	Вє	etween 6.0 –	17.0	Effluent	1/week	Grab or Meter	
Fecal Coliform (Interim Limit) ³	FC/100 mL	48,300 ⁴		58,660 ⁵	Effluent	2/month ⁶	Grab	
Fecal Coliform (Final Limit)	FC/100 mL	200 ^{4,7} (geo mean)	400 ^{4,7} (geo mean)	800 ^{5,7} (instant. max.)	Effluent	2/month ⁶	Grab	
Enterococcus	CFU/ 100 ml	Report ⁴		Report	Effluent	2/month ^{6,8}	Grab	
Enterococcus (Final Limit)	CFU/ 100 mL	1,155 ^{4,7} (geo mean)		4,290 ^{5,7} (instant. max.)	Effluent	2/month ⁶	Grab	
Total Ammonia	mg/L	15.5		34.6 ⁵	Effluent	1/week	24-hour composite	
(as N)	lbs/day	78		173			Calculation ¹	
		Parameter	s with Monit	oring Requirer	ments Only			
Copper	μg/L	Report		Report	Effluent	1/month	Grab	
Сорреі	lbs/day	Report		Report	Effluent	1/month	Calculation ¹	
C.I	μg/L	Report		Report	Effluent	1/quarter ⁹	Grab	
Silver	lbs/day	Report		Report	Effluent	1/quarter ⁹	Calculation ¹	
Per-and Polyfluoroalkyl	ng/L	Report		Report	Influent and effluent	1/quarter ¹¹	24-hour composite	
Substances (PFAS) ¹⁰	mg/kg dry weight			Report	Sludge	1/quarter ¹¹	Grab	
Whole Effluent Toxicity (WET) ¹²	TUc	Se	See Permit Part I.C.		Effluent	2/year ¹²	24-hour composite	
Temperature	°C	Report		Report	Effluent	1/week	Grab	

Table 1 - Effluent Limitations and Monitoring Requirements								
		Effluent Limitations			Monitoring Requirements			
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Sample Location	Sample Frequency	Sample Type	
Permit Application Effluent Testing Data ¹³						1/year		
Toxics Control Program ¹⁴						Twice every five years ¹⁴	Grab	

- (1) Loading (in lbs/day) is calculated by multiplying the concentration (in mg/L) by the corresponding flow (in mgd) for the day of sampling and a conversion factor of 8.34. For more information on calculating, averaging, and reporting loads and concentrations see the NPDES Self-Monitoring System User Guide (EPA 833-B-85-100, March 1985).
- (2) Percent Removal. The monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month using the following equation: (average monthly influent concentration average monthly effluent concentration) ÷ average monthly influent concentration x 100. Influent and effluent samples must be taken over approximately the same time period.
- (3) Interim limits are in effect until the end of the compliance schedule. Interim average monthly and maximum daily fecal coliform limits are based on the 95th and 99th percentile of fecal coliform data, respectively, between 2016-2021. See Permit Part II.C. for compliance schedule information.
- (4) If more than one bacteria 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 X 200 X 300)1/3 = 181.7.
- (5) Reporting is required within 24 hours of a maximum daily limit or instantaneous maximum limit violation. See Permit Part I.B.3 and III.G.
- (6) Between May and August of each year, fecal coliform and enterococcus sampling shall coincide with receiving water sampling in Permit Part I.D.
- (7) Final fecal coliform and enterococcus limits. See Permit Part II.C. for compliance schedule information.
- (8) Monitoring for enterococcus must begin within six months of the effective date of this permit.
- (9) Quarters are defined as: January 1 to March 31; April 1 to June 30; July 1 to September 30; and October 1 to December 31
- (10) See Appendix B for the list of PFAS chemicals to be analyzed.
- (11) Monitoring for PFAS chemicals is required for 2 years (8 quarters), beginning at the start of the first complete quarter in the third year of the permit term. See Permit Part I.B.8.
- (12) See Permit Part I.C.
- (13) Permit Application Effluent Testing Data See NPDES Permit Application Form 2A Table A and B for the list of pollutants to be included in this testing. The Permittee must use sufficiently sensitive analytical methods in accordance with Permit Part I.B.5.

Table 1 - Effluent Limitations and Monitoring Requirements							
Parameter Un		Eff	fluent Limitat	ions Monitoring Requirements			ments
	Units	Average Monthly	Average Weekly	Maximum Daily	Sample Location	Sample Frequency	Sample Type

⁽¹⁴⁾ The Permittee must analyze its effluent for all parameters identified in NPDES Application Form 2A, Table C, as well as the parameters identified in Table 4 in Permit Part II.D.

- 2. Narrative limitations for floating, suspended, or submerged matter:
 - a. The Permittee must not discharge floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.
 - b. The Permittee must observe the surface of the receiving water in the vicinity of where the effluent enters the surface water during the receiving water monitoring required in Permit Part I.D. Observations must include the date, time, observer, and whether there is presence of floating solids, visible foam or oily wastes which produce a sheen on the surface of the receiving water. Observations must be included with the receiving water monitoring report in Part I.D.11.
- 3. The Permittee must report within 24 hours any violation of the maximum daily limits for the following pollutants: fecal coliform, enterococcus, and total ammonia. Violations of all other effluent limits are to be reported at the time DMRs are submitted (See Permit Parts III.B. *Reporting of Monitoring Results* and III.G. *Twenty-four Hour Notice of Noncompliance Reporting* of this permit).
- 4. The Permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
- 5. For all effluent monitoring, the Permittee must use sufficiently sensitive analytical methods that meet the following:
 - a. Parameters with an effluent limit. The method must achieve a minimum level (ML) less than the effluent limitation unless otherwise specified in Table 1.
 - b. Parameters that do not have effluent limitations.
 - i. The Permittee must use a method that detects and quantifies the level of the pollutant, or
 - ii. The Permittee must use a method that can achieve a maximum ML less than or equal to those specified in Appendix A.

- c. For parameters that do not have an effluent limit, the Permittee may request different MLs. The request must be in writing and must be approved by EPA.
- d. See also Permit Part III.C Monitoring Procedures.
- 6. For purposes of reporting on the 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 the MDL}" and if a value is less than the ML, the Permittee must report "less than {numeric value of the ML}."
- 7. 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 the MDL}" and if the average value is less than the ML, the Permittee must report "less than {numeric value of the ML}." If a value is equal to or greater than the ML, the Permittee must report and use the actual value. The resulting average value must be compared to the compliance level in assessing compliance.

8. PFAS Monitoring

- a. Monitoring for PFAS chemicals is required for 2 years (8 quarters), beginning at the start of the first complete quarter in the third year of the permit term.
- b. Prior to approval of analytical methods for PFAS chemicals under 40 CFR Part 136, the permittee must use the latest revision of EPA Method 1633. After analytical methods for PFAS chemicals are approved under 40 CFR Part 136, the permittee may use any sufficiently sensitive approved analytical method. The PFAS chemicals that must be analyzed are listed in Appendix B.
- c. If any PFAS chemicals are detected in influent, effluent, or sludge sampling completed by three years after the effective date of the permit, the permittee must sample the discharges of industrial users identified as potential sources of PFAS chemicals in the inventory required by Permit Part II.D.2.c.vii. at least once for the PFAS chemicals listed in Appendix B by four years after the effective date of the final permit. Results of the industrial user sampling must be reported to EPA by four years and 3 months after the effective date of the permit. The permittee may submit the results of the sampling as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows:

 YYYY_MM_DD_AK0021466_Industrial Sampling_Survey_52799, where YYYY_MM_DD is the date that the permittee submits the written notification.
- C. Whole Effluent Toxicity (WET) Testing Requirements

The permittee must conduct chronic toxicity tests on effluent samples from outfall 001. Testing must be conducted in accordance with the following conditions while the permit remains in effect:

1. Sampling Frequency

- a. Toxicity testing must be conducted two times per year, except as provided in Permit Parts I.C.1.b. and I.C.4. One test must be conducted between April and August and one test must be conducted between September and March.
- b. If six consecutive WET tests do not exceed the WET trigger in Permit Part I.C.3.a., the monitoring frequency may be reduced to annually.
 - i. Annual WET testing must be conducted on a rotating quarterly schedule, so that each annual test is conducted during a different quarter than the previous year's test. After four years of annual testing (one test per year, each during a different quarter), the cycle is repeated.
- c. If any chronic WET test required under Permit Part I.C.1. exceeds the chronic WET permit trigger in Permit Part I.C.3.a., the Permittee must implement the Accelerated Toxicity Testing and Toxicity Reduction and Identification Evaluations (TRE/TIE) process in Permit Part I.C.4.

2. Test Species and Methods

- Toxicity test samples shall be collected at the designated NPDES sampling location downstream of the last treatment process where a representative sample can be obtained.
- b. If the discharged effluent is chlorinated, chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval from EPA and ADEC.
- c. Toxicity testing must be conducted on 24-hour composite samples of effluent. A split of each sample collected must be analyzed for the chemical and physical parameters required in Permit Part I.B., with a required sampling frequency of monthly or more frequently, using the same sample type required in Permit Part I.B. When the timing of sample collection coincides with that of the sampling required in Permit Part I.B., analysis of the split sample will fulfill the requirements of Permit Part I.B. For parameters for which grab samples are required in Permit Part I.B., grab samples must be taken during the same 24-hour period as the 24-hour composite sample used for the toxicity tests. A split of the first discrete effluent sample collected for the 24-hour composite sample for the toxicity test cannot be used to satisfy the required grab sample in Permit Part I.B.
- d. For the first four biannual tests, the permittee must conduct 48-hour embryo-larval development tests with a bivalve species, either

Crassostrea gigas (Pacific oyster) or Mytulis galloprovincialis (blue mussel) depending on the availability of the bivalve, and a 7-day larval growth and survival test using the fish species Atherinops affinis. For all subsequent tests, testing shall be conducted using the more sensitive test, either the bivalve test or the fish test.

- e. Testing must be conducted in accordance with the protocols and procedures outlined in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/600/R/95-136, August 1995 (hereafter 1995 West Coast WET Manual). The bivalve embryo-larval development test must be conducted in accordance with Section 13 and the fish test must be conducted in accordance with Section 11.
- f. The presence of chronic toxicity must be determined as specified in the 1995 West Coast WET Manual identified in Permit Part I.C.2.e.

3. Chronic WET Trigger

- a. There are no toxicity effluent limits for this discharge. For this discharge,
 ADEC has authorized a mixing zone for WET with a dilution factor of 33:1.
 The chronic WET permit trigger is 33 TUc.
- b. If the result of any WET test conducted in accordance with Permit Part I.C.1. exceeds the trigger in Permit Part I.C.3.a., the Permittee must implement the Accelerated Toxicity Testing and TRE/TIE Process identified in Permit Part I.C.4. below.

4. Accelerated Toxicity Testing and TRE/TIE Process

- a. If the chronic WET permit trigger in Permit Part I.C.3.a. is exceeded and the source of toxicity is known (e.g., a temporary plant upset), the Permittee shall conduct one additional toxicity test using the same species and test method. This test shall begin within 14 days of receipt of test results exceeding the chronic WET permit trigger. If the additional toxicity test does not exceed the trigger, the Permittee may return to the testing frequency in effect at the time of the initial exceedance.
- b. If the chronic WET permit trigger in Permit Part I.C.3.a. is exceeded and the source of toxicity is not known, the Permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days of receipt of test results exceeding the trigger. If none of the additional toxicity tests exceed the trigger, the Permittee may return to the testing frequency in effect at the time of the initial exceedance.
- c. If one of the additional toxicity tests required in Permit Part I.C.4.b. exceeds the chronic WET trigger in Permit Part I.C.3.a., then, within 14 days of receipt of this test result, the Permittee shall initiate a TRE using

as guidance, based on the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/ 833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the permittee shall develop and implement a Detailed TRE Workplan which shall include further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

- d. The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA test method 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/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation* (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996).
- e. Upon the completion of the TRE/TIE process in Permit Part I.C.4.d. the Permittee must revert to the biannual testing frequency specified in Permit Part I.C.1.a.

5. Quality Assurance

- a. The toxicity testing on each organism must include the following dilution series: 100%, 50%, 25%, 12.5%, 6.25%, 3%, and 1.5% effluent, and a control (0% effluent).
- All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with the 1995 West Coast WET Manual, and individual test protocols.
- c. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:
 - If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured inhouse, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.
 - ii. If either of the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods

- manual, the Permittee must re-sample and re-test within 14 days of receipt of the test results.
- iii. Control and dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of EPA and ADEC. In no case shall water that has not met test acceptability criteria be used for either dilution or control.
- iv. Prior to testing, the salinity of the effluent samples must be adjusted to match, as close as possible, the salinity of water the test organisms were cultured in. Salinity adjustment must be done according to the protocols in the 1995 West Coast WET Manual. If the use of hypersaline brine for salinity adjustment precludes the use of 100% effluent, the highest concentration possible after salinity adjustments shall be considered the 100% effluent concentration.
- v. WET sample holding times are established at 36 hours and samples must not exceed a holding time of 72 hours. The permittee must document the conditions that resulted in the need for the holding time exceeding 36 hours and the potential effect on the results in an attachment to the DMR for the month following sample collection.

6. Reporting

- a. The Permittee must submit the results of the toxicity testing on an annual basis as an attachment to the December NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Bioassay_02610, where YYYY_MM_DD is the date that the Permittee submits the testing.
- b. The report of toxicity test results must be a standalone report and include all relevant information outlined in Section 10, Report Preparation, of the 1995 West Coast WET Manual. In addition to toxicity test results, the Permittee must report: dates of sample collection and initiation of each test; flow rate at the time of sample collection; and the results of the monitoring required in Permit Part I.B.
- c. Results must be reported in TUc (chronic toxic units), which is defined as follows:
 - i. For survival endpoints, TUc = 100/NOEC.
 - ii. For all other test endpoints, TUc = 100/IC25
 - iii. IC25 means "25% inhibition concentration." The IC25 is a point estimate of the toxicant concentration, expressed in percent effluent, that causes a 25% reduction in a non-quantal biological measurement

- (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
- iv. NOEC means "no observed effect concentration." The NOEC is the highest concentration of toxicant, expressed in percent effluent, to which organisms are exposed in a chronic toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).
- d. The Permittee shall notify EPA and ADEC within 14 days of an exceedance of the chronic WET permit trigger in Permit Part I.C.3.a. This notification must describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed or reason(s) that no action(s) has been taken.

D. Receiving Water Monitoring

The Permittee must conduct annual receiving water monitoring. Receiving water monitoring must start within one calendar year after the effective date of the permit and continue annually while the permit remains in effect. Receiving water monitoring must be conducted during the lowest daylight slack tide of the monitoring month, unless impractical for safety or logistical concerns (i.e., inclement weather). The program must meet the following requirements:

 The following parameters identified in Table 2 shall be measured at the locations and frequencies specified.

Table 2 - Receiving Water Monitoring Requirements								
Parameter	Units	Sample Type	Sample Depth ¹	Frequency	Location			
Temperature	°C	Grab	S, M, B	Annually (August or September)	See Permit Parts I.D.2.a,b,c,d			
Salinity	g/kg	Grab	S, M, B	Annually (August or September)	See Permit Parts I.D.2.a,b,c			
Dissolved Oxygen	mg/L	Grab	S, M, B	Annually (August or September)	See Permit Parts I.D.2.a,b,c			
рН	standard units	Grab	S, M, B	Annually (August or September)	See Permit Parts I.D.2.a,b,c			

	Table 2 - Receiving Water Monitoring Requirements							
Parameter	Units	Sample Type	Sample Depth ¹	Frequency	Location			
Secchi Disk Depth	feet	Visual	Per method	Annually (August or September)	See Permit Parts I.D.2.a,b,c			
Turbidity	NTU	Grab	S, M, B	Annually (August or September)	See Permit Parts I.D.2.a,b,c			
Fecal Coliform	#/100 ml	Grab	S	Monthly ^{2,3} (May through August)	See Permit Parts I.D.2.a,b,c,d			
Enterococcus	#/100 ml	Grab	S	Monthly ^{2,3} (May through August)	See Permit Parts I.D.2.a,b,c,d			
Ammonia	mg/L	Grab	S (or just below)	Annually (August or September)	See Permit Parts I.D.2.a,b,c			

Notes:

- (1) S=Surface (<1meter), M=Mid-depth, B=Bottom
- (2) Fecal coliform and enterococcus sampling shall coincide with effluent sampling in Permit Part I.B.
- (3) See Permit Parts I.D.9. and I.D.10. for information on the conditions necessary to discontinue receiving water monitoring for bacteria.
 - 2. Monitoring stations must be established in Zimovia Straight at the following locations identified in Figures 1 and 2.
 - a. <u>Zone of Initial Dilution (ZID) Station:</u> One station shall be located over the center point of the 240-foot diffuser. Samples must be analyzed for all parameters in Table 2.
 - b. <u>ZID Boundary Stations</u>: Four stations shall be located along the edges of the ZID. One station shall be located along each of the north, south, east, and west boundaries of the ZID. The Permittee must collect samples in the plume and at opposite sides of the ZID if the plume is visible. Consistent with the recommendations in the 301(h) TSD for setting spatial boundaries for the ZID, EPA has established the spatial dimensions of the ZID to include the entire water column within 100 feet of any point

- of the 240-foot diffuser. This is the same ZID spatial boundary as the 2002 permit. Samples must be analyzed for all parameters in Table 2.
- c. <u>Reference Sites:</u> Two stations shall be located at reference sites. One station shall be located approximately 3000 feet northwest of the outfall and one station shall be located approximately 3000 feet southeast of the outfall. Samples must be analyzed for all parameters in Table 2.
- d. <u>Nearshore Sites:</u> Six stations shall be located along the nearshore intertidal area directly east of the outfall. Samples must be analyzed for temperature, fecal coliform, and enterococcus. Only surface samples must be taken at nearshore sites.
 - Site 1: ~3 feet from shore centered over the outfall pipe
 - Site 2: ~300 feet north of site 1, as close to shore as feasible
 - Site 3: ~1000 feet north of site 1, as close to shore as feasible
 - Site 4: ~300 feet south of site 1, as close to shore as feasible
 - Site 5: ~1000 feet south of site 1, as close to shore as feasible
 - Special Site A: ~3500 feet north of site 1 along the beach area on the west side of Point Shekesti.
- 3. Sampling stations shall be established using an electronic navigational aid to insure that the same sampling stations are used during subsequent sampling events. The Permittee may propose alternate reference station locations and submit them for EPA review and approval.
- 4. To the extent practicable, receiving water sample collection must occur on the same day as effluent sample collection.
- 5. The flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
- 6. Samples must be analyzed for the parameters listed in Table 2 above.
- 7. For all receiving water monitoring, the Permittee must use sufficiently sensitive analytical methods that meet the following:
 - a. The method must detect and quantify the level of the pollutant, or
 - b. The Permittee must use a method that can achieve MLs less than or equal to those specified in Appendix A. The Permittee may request different MLs. The request must be in writing and must be approved by EPA.
- 8. Quality assurance/quality control (QA/QC) plans for all the monitoring must be documented in the Quality Assurance Plan (QAP) required under Permit Part II.B.
- 9. Receiving water monitoring for fecal coliform can be discontinued if the permittee achieves 12 consecutive months of compliance with the final fecal

- coliform limits and the following summer's receiving water sampling results demonstrate full compliance with Alaska's water quality standards for fecal coliform at all ZID Boundary (Permit Part I.D.2.b.) and Nearshore Sites (Permit Part I.D.2.d.). In the event of any violation of the final fecal coliform limits, the permittee must restart the receiving water monitoring for fecal coliform until 12 consecutive months of compliance is achieved.
- 10. Receiving water monitoring for enterococcus can be discontinued if the permittee achieves 12 consecutive months of compliance with the final enterococcus limits and the following summer's receiving water sampling results demonstrate full compliance with Alaska's water quality standards for enterococcus at all ZID Boundary (Permit Part I.D.2.b.) and Nearshore Sites (Permit Part I.D.2.d.). In the event of any violation of the final enterococcus limits, the permittee must restart the receiving water monitoring for fecal coliform until 12 consecutive months of compliance is achieved.

11. Submission of Receiving Water Monitoring Data

- a. The Permittee must submit all receiving water monitoring results for the previous calendar year for all parameters in an annual report to EPA and ADEC by March 31st of the following year and with the NPDES and 301(h) renewal application in Permit Part V.B. The file must be in the format of one analytical result per row and include the following information: name and contact information of laboratory, sample identification number, sample location in latitude and longitude (decimal degrees format), method of location determination (i.e., GPS, survey etc.), date and time of sample collection, water quality parameter (or characteristic being measured), analysis result, result units, detection limit and definition (i.e., MDL etc.), analytical method, date completed, and any applicable notes.
- b. The Permittee must submit the receiving water monitoring report as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_SWMRP, where YYYY_MM_DD is the date that the Permittee submits the report. A copy of the receiving water monitoring report shall also be provided to the National Marine Fisheries Service (NMFS) at: akr.prd.records@noaa.gov, with "AKRO-2021-03537 Mitigation Measures Reporting for Wrangell" as the email subject line.

E. Biological Monitoring for Benthic Infauna

- A benthic survey must be conducted once every five years while the permit remains in effect. To the extent practicable, sampling shall be coordinated with the sampling times for the receiving water monitoring in Permit Part I.D. and may be conducted during maintenance dives.
- 2. Sampling shall be conducted at the same locations as the surface water monitoring stations identified in Permit Parts I.D.2.a., I.D.2.b., and I.D.2.c.

- 3. One benthic sample shall be collected from each sampling location. Visual observations of benthic community composition shall also be collected at each sampling site.
- 4. Benthic samples shall be sieved and analyzed for benthic community composition using standard benthic survey protocols such as those found in Recommended Protocols for Sampling and Analyzing Subtidal Benthic Macroinvertebrate Assemblages in Puget Sound, USEPA 1987.
- 5. Sunflower Sea Star Observations: Data shall be collected on the presence and density of sunflower sea stars (*Pycnopodia helianthoides*) during the benthic survey and the results included in the report in Permit Part I.E.6. If it appears that a sunflower sea star has sea star wasting syndrome or if any dead sunflower sea stars are observed, pictures of the individuals will be taken, latitude/longitude and/or transect line of the observed individual(s) will be noted, and infected individuals will be counted. The infected sunflower sea stars will not be touched or relocated.
- 6. The Permittee must submit all benthic survey results to EPA and ADEC in the form of a written biological monitoring report by March 31 of the following year as an attachment to NetDMR, and with the NPDES and 301(h) renewal application in Permit Part V.B. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_SUPMR, where YYYY_MM_DD is the date that the Permittee submits the report. A copy of the biological monitoring report shall also be provided to NMFS at: akr.prd.records@noaa.gov, with "AKRO-2021-03537 Mitigation Measures Reporting for Wrangell" as the email subject line.

II. SPECIAL CONDITIONS

A. Operation and Maintenance Plan (O&M Plan)

In addition to the requirements specified in Permit Part IV.E., the Permittee must develop and implement an Operations and Maintenance (O&M) Plan for the wastewater treatment facility. Any existing O&M Plan may be modified for compliance with this Part. Any changes occurring in the operation of the plant must be reflected within the O&M Plan.

Within 180 days of the effective date of this permit, the Permittee must submit written notice to EPA that the O&M Plan has been developed and implemented.

The Permittee may submit the written notification as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_O&M_50108, where YYYY_MM_DD is the date that the Permittee submits the written notification. The plan must be retained on site and made available to EPA and ADEC upon request.

B. Quality Assurance Plan (QAP)

The Permittee must develop a QAP for all monitoring required by this permit. Any existing QAPs may be modified for compliance with this Part.

Within 180 days of the effective date of this permit, the Permittee must submit written notice to EPA that the QAP has been developed and implemented. The Permittee may submit written notification as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_QAP_55099, where YYYY_MM_DD is the date that the Permittee submits the written notification. The plan must be retained on site and made available to EPA and ADEC upon request.

- The QAP must be designed to assist in planning for the collection and analysis
 of effluent and receiving water samples in support of the permit and in
 explaining data anomalies when they occur.
- 2. Throughout all sample collection and analysis activities, the Permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in EPA Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance Project Plans (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
- 3. At a minimum, the QAP must include the following:
 - a. Details on the number of samples, sample collection procedures, type of sample containers, preservation of samples, holding times, analytical methods, procedures for on-site measurements and/or laboratory analysis (including calibration), analytical detection, quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, chain of custody procedures, and laboratory data delivery requirements. Sample containers, preservation techniques and maximum holding times must adhere to the requirements in 40 CFR 136 and in accordance with the approved test methods.
 - b. Map(s) indicating the location of each sampling point.
 - c. Qualification and training of personnel and maintenance of the training records.
 - d. Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the Permittee.
- 4. The Permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
- 5. Copies of the QAP must be retained on site and made available to EPA and/or ADEC upon request.

C. Fecal Coliform and Enterococcus Schedule of Compliance

- 1. The Permittee must achieve compliance with the final fecal coliform and enterococcus limitations in Table 1 within five years of the effective date of this permit.
- 2. Until compliance with the final effluent limits for fecal coliform are achieved the Permittee must comply with the interim limits in Permit Part I.B. and maintain the shoreline signs advising the public about the existence of the mixing zone and that the consumption of raw shellfish from the mixing zone is not advised.
- 3. Until compliance with the final effluent limits for fecal coliform and enterococcus are achieved the Permittee must complete the tasks and reports listed in Table 3.

Та	Table 3 - Tasks Required Under the Schedule of Compliance for Bacteria						
Task No.	Due By	Task Activity					
1	1 year from effective date of permit	The Permittee must develop a facility plan that evaluates alternatives to meet the final effluent limitations for fecal coliform and enterococcus bacteria and select a preferred alternative. Deliverable: The Permittee must provide written notice to EPA and ADEC that the facility plan has been developed and that a preferred alternative has been selected. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Plan_43699, where YYYY_MM_DD is the date that the Permittee submits the written notification					
2	2 years from the effective date of the permit	Final Design The Permittee must complete design of the selected alternative and request approval to construct from DEC's Engineering Support and Plan Review (ESPR). Deliverable: The Permittee must provide written notice to EPA and ADEC that the final design is complete. The Permittee must request approval to construct from DEC's Engineering Support and Plan Review (ESPR), no later than two years and 14 days after the effective date of the permit. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Plan_43699, where YYYY_MM_DD is the date that the Permittee submits the written notification.					

Table 3 - Tasks Required Under the Schedule of Compliance for Bacteria			
Task No.	Due By	Task Activity	
3	3 years from the effective date of the permit	Funding and Contractor Selection The Permittee must secure funding and select a contractor to construct upgrades. Deliverable: The Permittee must provide written notice to EPA and ADEC that funding has been secured for the selected alternative and that a contractor has been selected to construct upgrades. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_bid_CS014, where YYYY_MM_DD is the date that the Permittee submits the written notification.	
4	4 years from the effective date of the permit	Construction Begins The Permittee must begin construction to achieve compliance with the final bacteria effluent limitations. Deliverable: The Permittee must provide written notice to EPA and ADEC that construction has commenced on the selected alternative. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Construct_90408, where YYYY_MM_DD is the date that the Permittee submits the report.	
5	5 years from the effective date of the permit	Meet Effluent Limitations for Fecal Coliform and Enterococcus The Permittee must complete construction and optimize facility upgrade operations, such that compliance with the final fecal coliform and enterococcus effluent limits are achieved. Final approval to operate must be requested from ESPR. Deliverables: 1) The Permittee must request final approval to operate from ADEC's ESPR. 2) The Permittee must provide EPA and ADEC sampling results and a written notice that the final bacteria effluent limitations are achieved. The Permittee may submit the sampling results and written notification as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Limits_FELAC, where YYYY_MM_DD is the date that the Permittee submits the written notification.	

4. The Permittee must submit an Annual Report of Progress to EPA and ADEC which outlines the progress made towards reaching the compliance date for

the bacteria effluent limitations. At a minimum, the annual report must include:

- a. An assessment of the previous year of bacteria data and comparison to the interim and final effluent limitations.
- b. A report on progress made towards meeting the effluent limitations, including the applicable deliverables required in Table 3 and contained in Paragraph 2 of this Part.
- c. Further actions and milestones targeted for the upcoming year.
- d. The annual Report of Progress must be submitted by one year and 14 days after the effective date of this permit each year. The Permittee may submit the annual report as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Progress_CS010, where YYYY_MM_DD is the date that the Permittee submits the written report.

D. Toxics Control Program

- 1. Chemical Analysis and Source Identification Toxic Pollutants and Pesticides
 - a. The Permittee must analyze its effluent for all parameters identified in NPDES Application Form 2A, Table C, as well as the parameters identified in Table 4 below. The analysis must be done on 24-hour composite samples twice every five years while the permit remains in effect, once during the wet weather season and once during the dry weather season.

Table 4 - Toxic Pollutants and Pesticides for Alaska 301(h) Facilities				
4,4'-DDT ¹	Chlordane ¹			
Aldrin ¹	Endosulfan sulfate ¹			
Alpha-endosulfan ¹	Endrin aldehyde ¹			
Beta-endosulfan ¹	Heptachlor epoxide ¹			
Dieldrin ¹	Malathion ²			
Endrin ¹	Toxaphene ¹			
Heptachlor epoxide ¹	Asbestos ¹			
Lindane	2,3,7,8-TCDD ¹			
Total polychlorinated biphenyls ¹ (PCBs)	Guthion ²			
DDE ¹ (metabolite of DDT)	Methoxychlor ²			
Demeton ²	Parathion ²			
Mirex ²				
(1) 40 CFR 401.15				
(2) 40 CFR 125.58(p)				

- b. The Permittee shall provide an analysis of the known or suspected sources of any toxic substances or pesticides identified during the effluent analyses.
- c. The results of the effluent analyses and source identification must be submitted as an electronic attachment to the following March's NetDMR, and must also be included with the renewal application materials identified in Permit Part V.B. The results of the effluent analyses must be in Excel file format and the source identification must be in word or adobe format. The file name of the electronic attachments must be as follows: YYYY_MM_DD_AK0021466_Toxics Scan_02999, where YYYY_MM_DD is the date that the Permittee submits the written notification.
- d. Unless required by the State of Alaska, the requirements of Permit Parts II.D.1.a. and II.D.1.b. shall not apply if the Permittee certifies that there are no known or suspected sources of toxic pollutants or pesticides and documents the certification with an industrial user survey as described by 40 CFR 403.8(f)(2) and Permit Part II.D.2.c. below.

2. Industrial Waste Management

- a. The Permittee must not authorize the introduction of pollutants that would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.
- b. The Permittee must not authorize, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:
 - i. Any pollutant which may cause Pass Through or Interference;
 - Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60° C (140° F) using the test methods specified in 40 CFR 261.21;
 - iii. Pollutants that will cause corrosive structural damage to the POTW, and in no case indirect discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such indirect discharges;
 - Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;
 - v. Any pollutant, including oxygen demanding pollutants (e.g., BOD₅), released in an indirect discharge at a flow rate and/or pollutant

- concentration that will cause Interference with any treatment process at the POTW;
- vi. Heat in amounts that will inhibit biological activity in the POTW resulting in interference, and in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
- vii. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through at the POTW;
- viii. Pollutants that result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- ix. Any trucked or hauled pollutants, except at discharge points designated by the POTW
- x. Any specific pollutant which exceeds a local limitation established by the Permittee in accordance with the requirements of 40 CFR 403.5(c) and (d).
- c. The Permittee must develop and maintain a master list of the industrial users introducing pollutants to the POTW. Industrial user means any source of indirect discharge from a non-domestic source. This list must identify:
 - i. Names and addresses of all industrial users;
 - ii. Which industrial users are significant industrial users (SIUs) (See Paragraph e. of this Part);
 - iii. Which SIUs are subject to Categorical Pretreatment Standards (See 40 CFR 405-471);
 - iv. Which standards are applicable to each industrial user (if any);
 - v. Which industrial users are subject to local standards that are more stringent than the Categorical Pretreatment Standards; and
 - vi. Which industrial users are subject only to local requirements.
 - vii. Which industrial users may discharge PFAS chemicals to the collection system.
- d. In addition to the notification requirements for the introduction of new pollutants from an indirect discharger outlined in Permit Part III.J.1., the Permittee must also submit the master list required in Permit Part II.D.2.c., along with a summary description of the sources and information gathering methods used to develop this list, to EPA with the NPDES and 301(h) renewal application in Permit Part V.B. The Permittee

must also submit the list as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows:

YYYY_MM_DD_AK0021466_Industrial User_12099, where YYYY_MM_DD is the date that the Permittee submits the written notification.

- e. For the purposes of this list development, the term SIU means:
 - i. All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and
 - ii. 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);
 - b) contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
 - c) is designated as such by EPA or the Permittee on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violation any Pretreatment Standard or requirement in accordance with 40 CFR 403.8(f)(6).
- f. If SIUs are identified during the term of this permit, the Permittee must develop a legally enforceable municipal code to authorize or enable the POTW to apply and enforce the requirements of sections 307(b) and (c) and Sections 402(b)(8) and (9) of the Act and comply with the minimum requirements of 40 CFR 403.8(f)(1).
- g. The Permittee must submit the municipal code to the Director, Enforcement and Compliance Assurance Division via email with the subject line "CWA NPDES_AK0021466_Municipal Code." The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Municipal Code, where YYYY_MM_DD is the date that the permittee submits the report.
- h. If no industrial users are identified, in lieu of the list under Permit Part II.D.2.c. above, the Permittee shall provide a certification with the NPDES renewal application in Permit Part V.B. stating there are no known or suspected industrial users and therefore no master list is available.

3. Non-industrial Source Control Program

a. The Permittee must develop and implement a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW. Elements of the public education program must include the development and dispersant of information to increase public awareness of the need for the proper and non-hazardous disposal of

- waste oils, solvents, herbicides, pesticides, and other household substances that contain toxic pollutants, and disposal guidelines specifying what toxic pollutants can and cannot be discharged to the sewer system; and
- b. An annual report on the nonindustrial source control program shall be submitted by March 31 of the following year as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_NISCP_ANNRP, where YYYY_MM_DD is the date that the Permittee submits the written notification. The report shall summarize public engagement activities and other actions taken to minimize the entrance of nonindustrial toxic pollutants and pesticides into the POTW, and their effectiveness to control nonindustrial sources of toxic pollutants and pesticides.

E. Interim Beach Advisory

1. Until the final bacteria limits in Permit Part I.B. are achieved signs shall be placed and/or maintained on the shoreline/beach near the mixing zone (aka ZID) and outfall line. The signs shall state that primary treated domestic wastewater is being discharged, a mixing zone exists, and certain activities such as the harvesting of shellfish for raw consumption and bathing are not advised within the mixing zone. The sign shall also provide the name and owner of the facility, approximate location and size of the mixing zone, and a facility contact phone number for additional information. An outfall sign must also be placed at the beach designated as a shellfish collection area north and east of the diffuser outfall. The sign shall state that the consumption of raw shellfish is not advised along with the advice of thoroughly cooking all shellfish and discarding any shellfish that do not open after cooking.

F. Emergency Response and Public Notification Plan

- 1. The Permittee must develop and implement an overflow emergency response and public notification plan that identifies measures to protect public health from overflows that may endanger health and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the plan must include mechanisms to:
 - Ensure that the Permittee is aware (to the greatest extent possible) of all overflows from portions of the collection system over which the Permittee has ownership or operational control and unanticipated bypass or upset that exceed any effluent limitation in the permit;
 - Ensure appropriate responses, including assurance that reports of an overflow or of an unanticipated bypass or upset that exceed any effluent limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;

- Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained; and
- e. Provide emergency operations.
- The Permittee must submit written notice to EPA that the plan has been developed and implemented within 180 days of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this Part. The plan must be retained on site and made available to EPA and ADEC upon request.
- 3. The Permittee may submit the written notification as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_ERPNP, where YYYY_MM_DD is the date that the Permittee submits the written notification.

III. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the Permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample.

The Permittee must analyze the additional samples for those parameters limited in Permit Part I.B. that are likely to be affected by the discharge.

The Permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with Permit Part III.C. The Permittee must report all additional monitoring in accordance with Permit Part III.D.

B. Reporting of Monitoring Results

The Permittee must submit monitoring data and other reports electronically using NetDMR (https://npdes-ereporting.epa.gov/net-netdmr).

- 1. Monitoring data must be submitted electronically to EPA no later than the 15th of the month following the completed reporting period.
- 2. The Permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Permit Part V.F.
- 3. The Permittee must submit copies of the DMRs and other reports to ADEC.

- 4. Submittal of Reports as NetDMR Attachments. Unless otherwise specified in this permit, the Permittee must submit all reports to EPA and ADEC as NetDMR attachments rather than as hard copies. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Report Type Name_Identifying Code, where YYYY MM DD is the date that the Permittee submits the attachment.
- 5. The Permittee may use NetDMR after requesting and receiving permission from US EPA Region 10. NetDMR is accessed from: https://netdmr.epa.gov/netdmr/public/home.htm.

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless another method is required under 40 CFR subchapters N or O, or other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5.

D. Additional Monitoring by Permittee

If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the Permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by EPA, the Permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information must include:

- 1. the date, exact place, and time of sampling and measurements;
- the name(s) of the individual(s) who performed the sampling or measurements;
- 3. the date(s) and time analyses were performed;
- 4. the names of the individual(s) who performed the analyses;
- 5. the analytical techniques or methods used; and
- 6. the results of such analyses.

F. Retention of Records

The Permittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of EPA or ADEC at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

- The Permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the Permittee becomes aware of the circumstances:
 - a. any noncompliance that may endanger health or the environment;
 - b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Permit Part IV.F.);
 - c. any upset that exceeds any effluent limitation in the permit (See Permit Part IV.F.3.b.); or
 - d. any violation of a maximum daily discharge limitation for total ammonia, fecal coliform, or enterococcus bacteria;
 - e. any overflow prior to the treatment works over which the Permittee has ownership or has operational control. An overflow is any spill, release, or diversion of municipal sewage including:
 - an overflow that results in a discharge to waters of the United States; and
 - ii. an overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately-owned sewer or building lateral) that does not reach waters of the United States.
- 2. The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under Paragraph 1 above. The written submission must contain:
 - a. a description of the noncompliance and its cause;
 - b. the period of noncompliance, including exact dates and times;
 - c. the estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - e. if the noncompliance involves an overflow, the written submission must contain:
 - i. the location of the overflow;
 - ii. the receiving water (if there is one);
 - iii. an estimate of the volume of the overflow;
 - iv. a description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);

- v. the estimated date and time when the overflow began and stopped or will be stopped;
- vi. the cause or suspected cause of the overflow;
- vii. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- viii. an estimate of the number of persons who came into contact with wastewater from the overflow; and
- ix. steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.
- 3. The Director of the Enforcement and Compliance Assurance Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.
- 4. The permittee must sign and certify the report in accordance with the requirements of Permit Part V.F. Reports must be submitted via email to R10enforcement@epa.gov with the subject line "CWA NPDES_AK0021466_Noncompliance Report." The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021466_Noncompliance Report, where YYYY_MM_DD is that date that the permittee submits the report. A copy must also be submitted to ADEC at the following email address: DEC.Water.WQPermit@alaska.gov.
- 5. As of December 21, 2025 or an EPA-approved alternative date (See 40 CFR 127.24(e) or (f)), all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this Part must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this Part and 40 CFR Part 3 (including, in all cases, subpart D to Part 3), 40 CFR 122.22, and 40 CFR Part 127.

H. Other Noncompliance Reporting

The Permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Permit Part III.B. are submitted. The reports must contain the information listed in Permit Part III.G.2. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall also contain the applicable required data in appendix A to 40 CFR Part 127. As of December 21, 2025 or an EPA-approved alternative date (See 40 CFR 127.24(e) or (f)), all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this Part must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this Part and 40 CFR Part 3 (including, in all

cases, subpart D to Part 3), 40 CFR 122.22, and 40 CFR Part 127. 40 CFR Part 127 is not intended to undo existing requirements for electronic reporting. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this Part.

I. Public Notification

The Permittee must immediately notify the public, health agencies, and other affected entities (e.g., public water systems) of any overflow that the Permittee owns or over which it has operational control; or any unanticipated bypass or upset that exceeds any effluent limitation in the permit in accordance with the notification procedures developed in accordance with Permit Part II.F.

Until the final bacteria limits in Permit Part I.B. are achieved signs shall be placed and/or maintained on the shoreline/beach near the mixing zone and outfall line. The signs shall state that primary treated domestic wastewater is being discharged, a mixing zone exists, and certain activities such as the harvesting of shellfish for raw consumption and bathing are not advised within the mixing zone. The sign shall also provide the name and owner of the facility, approximate location and size of the mixing zone, and a facility contact phone number for additional information. An outfall sign must also be placed at the beach designated as a shellfish collection area north and east of the diffuser outfall. The sign shall state that the consumption of raw shellfish is not advised along with the advice of thoroughly cooking all shellfish and discarding any shellfish that do not open after cooking.

J. Notice of New Introduction of Toxic Pollutants

The Permittee must notify the Director of the Water Division and ADEC in writing of:

- Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants; and
- Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- 3. For the purposes of this Part, adequate notice must include information on:
 - a. The quality and quantity of effluent to be introduced into the POTW, and
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- 4. The Permittee must notify the Director of the Water Division via email at EPAR10WD-NPDES@epa.gov with the subject line "CWA NPDES_AK0021466_New Pollutants." The file name of the electronic

- attachment must be as follows: YYYY_MM_DD_AK0021466_New Pollutants, where YYYY MM DD is the date that the permittee submits the notice.
- 5. The Permittee must notify ADEC by email at the following address: DEC.Water.WQPermit@alaska.gov.

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions

- 1. Civil and Administrative Penalties. Pursuant to 40 CFR Part 19 and the CWA, any person who violates CWA Sections 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any such sections in a permit issued under CWA Section 402, or any requirement imposed in a pretreatment program approved under CWA Sections 402(a)(3) or 402(b)(8), is subject to a civil penalty not to exceed the maximum amounts authorized by CWA Section 309(d) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 USC 2461 note; Pub. L. 101-410) as amended by the Debt Collection Improvement Act of 1996 (31 USC 3701 note) and the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (28 USC 2461 note, Pub. L.114-74) (currently \$66,712 per day for each violation).
- 2. Administrative Penalties. Any person may be assessed an administrative penalty by the Administrator for violating CWA Sections 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any of such sections in a permit issued under CWA Section 402. Pursuant to 40 CFR Part 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by CWA Section 309(g)(2)(A) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 USC 2461 note; Pub. L. 101-410) as amended by the Debt Collection Improvement Act of 1996 (31 USC 3701 note) and the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (28 USC 2461 note, Pub. L.114-74) (currently \$26,685 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$66,712). Pursuant to 40 CFR Part 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by CWA Section 309(g)(2)(B) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 USC 2461 note; Pub. L. 101-410) as amended by the Debt Collection Improvement Act of 1996 (31 USC 3701 note) and the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (28 USC 2461 note, Pub. L.114-74) (currently \$26,685 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$333,552).

3. Criminal Penalties:

- a. Negligent Violations. The Act provides that any person who negligently violates CWA Sections 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any of such sections in a permit issued under CWA Section 402, or any requirement imposed in a pretreatment program approved under CWA Sections 402(a)(3) or 402(b)(8), is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.
- b. Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- c. Knowing Endangerment. Any person who knowingly violates CWA Sections 301, 302, 303, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any of such sections in a permit issued under CWA Section 402, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in CWA Section 309(c)(3)(B)(iii) shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- d. False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The CWA further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document

submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate

The Permittee must 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.

E. Proper Operation and Maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs 2 and 3 of this Part.

2. Notice.

- a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it must submit prior written notice, if possible at least 10 days before the date of the bypass. As of December 21, 2025 or an EPA-approved alternative date (see 40 CFR 127.24(e) or (f)), all notices submitted in compliance with this Part must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this Part and 40 CFR Part 3 (including, in all cases, subpart D to Part 3), 40 CFR 122.22, and 40 CFR Part 127.
- b. Unanticipated bypass. The Permittee must submit notice of an unanticipated bypass as required under Permit Part III.G. As of December 21, 2025 or an EPA-approved alternative date (See 40 CFR 127.24(e) or (f)), all notices submitted in compliance with this Part must be submitted

electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this Part and 40 CFR Part 3 (including, in all cases, subpart D to Part 3), 40 CFR 122.22, and 40 CFR Part 127.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Director of the Enforcement and Compliance Assurance Division may take enforcement action against the Permittee for a bypass, unless:
 - The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - iii. The Permittee submitted notices as required under Paragraph 2 of this Part.
- b. The Director of the Enforcement and Compliance Assurance Division may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Paragraph 3.a. of this Part.

G. Upset Conditions

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the Permittee meets the requirements of Paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- 2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the Permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - b. The permitted facility was, at the time of the upset, being properly operated;
 - c. The Permittee submitted notice of the upset as required under Permit Part III.G., Twenty-four Hour Notice of Noncompliance Reporting; and

- d. The Permittee complied with any remedial measures required under Permit Part IV.D., *Duty to Mitigate*.
- 3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

H. Toxic Pollutants

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the CWA and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

I. Planned Changes

The Permittee must give written notice to the Director of the Water Division at the address specified in Permit Part III.J.4. and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

- 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this permit.
- 3. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application site.

J. Anticipated Noncompliance

The Permittee must give written advance notice to the Director of the Enforcement and Compliance Assurance Division and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

K. Reopener

This permit may be reopened to include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the CWA. The Director may modify or revoke and reissue the permit if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

V. GENERAL PROVISIONS

A. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.63, 122.64, or 124.5. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. Duty to Reapply

If the Permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the Permittee must submit a new application at least 180 days before the expiration date of this permit. The renewal application must include a completed *Applicant Questionnaire for Modification of Secondary Treatment Requirements*, included as the Appendix to Subpart G of 40 CFR 125.

C. Duty to Provide Information

The Permittee must furnish to EPA and ADEC, within the time specified in the request, any information that EPA or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee must also furnish to EPA or ADEC, upon request, copies of records required to be kept by this permit.

D. Other Information

When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to EPA or ADEC, it must promptly submit the omitted facts or corrected information in writing.

E. Identification of the Initial Recipient for NPDES Electronic Reporting Data

The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in appendix A to 40 CFR Part 127) to the appropriate initial recipient, as determined by EPA, and as defined in 40 CFR 127.2(b). EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group. See 40 CFR 127.2(c). EPA will update and maintain this listing.

F. Signatory Requirements

All applications, reports, or information submitted to EPA and ADEC must be signed and certified as follows.

1. All permit applications must be signed as follows:

- a. For a corporation: by a responsible corporate officer.
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
- c. For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
- All reports required by the permit and other information requested by EPA or ADEC must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
 - c. The written authorization is submitted to the Director of the Enforcement and Compliance Assurance Division and ADEC.
- 3. Changes to authorization. If an authorization under Paragraph 2 of this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Paragraph 2 of this Part must be submitted to the Director of Enforcement and Compliance Assurance Division and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 4. Certification. Any person signing a document under this Part must make the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- 5. Electronic reporting. If applications or reports required under this permit are submitted electronically by or on behalf of the NPDES-regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this Part, and shall ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3)

(Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

G. Availability of Reports

In accordance with 40 CFR Part 2, information submitted to EPA pursuant to this permit may be claimed as confidential by the Permittee. In accordance with the Act, permit applications, permits, and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice to the Permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

H. Inspection and Entry

The Permittee must allow the Director of the Enforcement and Compliance Assurance Division, EPA Region 10; ADEC; or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

- Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of federal, tribal, state, or local laws or regulations.

J. Transfers

This permit is not transferable to any person except after written notice to the Director of the Water Division at the address specified in Permit Part III.J.4. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as

may be necessary under the Act (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

K. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the CWA.

VI. RECEIVING WATER MONITORING MAPS

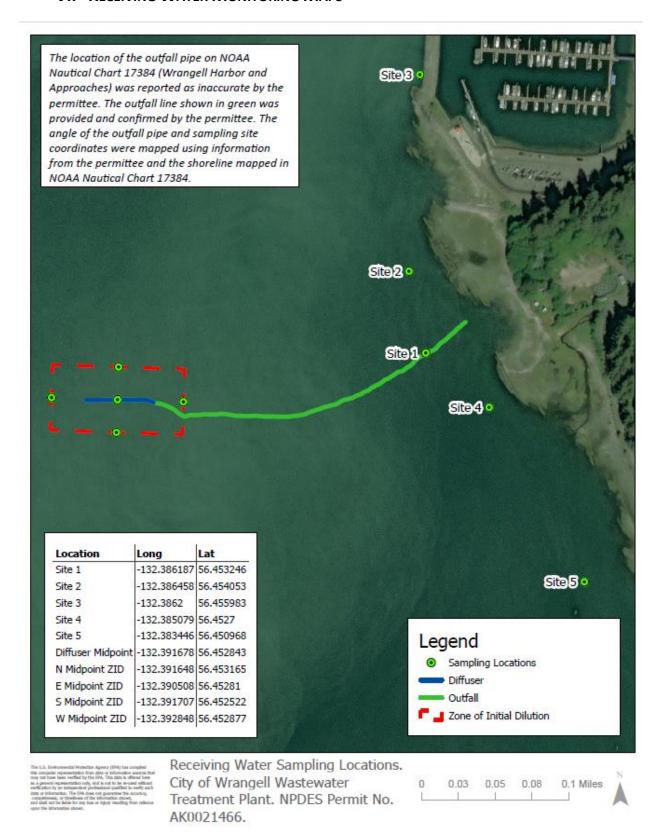


Figure 1.

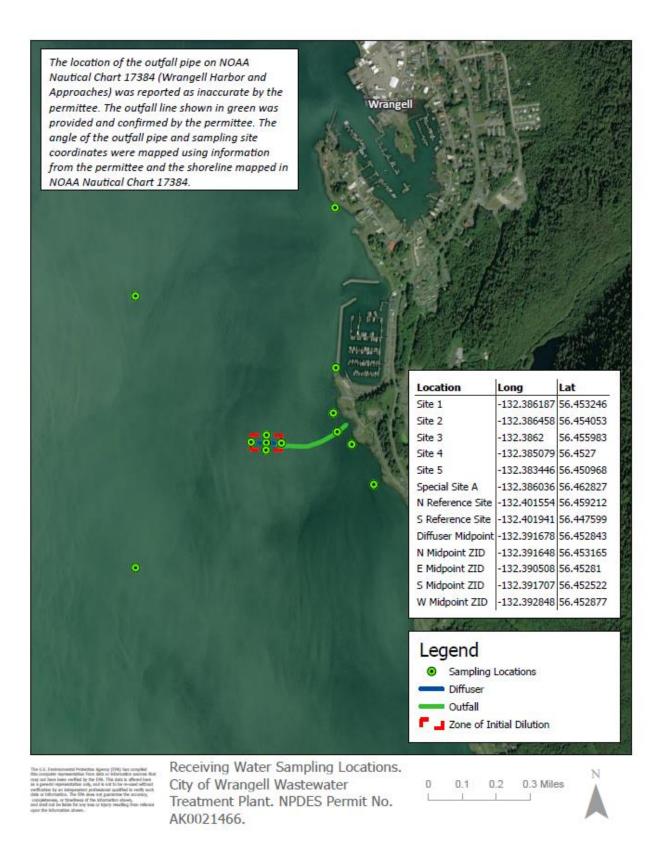


Figure 2.

VII. DEFINITIONS

"Act" means the Clean Water Act.

"Acute Toxic Unit" ("TUa") is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end on the acute exposure period (i.e., 100/"LC50").

"ADEC" means Alaska Department of Environmental Conservation.

"Administrator" means the Administrator of the EPA, or an authorized representative.

Approval Authority means the Regional Administrator of EPA Region 10, or an authorized representative.

"Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

"Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

"Best Management Practices" (BMPs) 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.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"Composite" - see "24-hour composite".

"CWA" means the Clean Water Act, 33 USC 1251 *et seq.* (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92–500, as amended by Public Law 95–217, Public Law 95–576, Public Law 96–483 and Public Law 97– 117.

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Director of the Enforcement and Compliance Assurance Division" means the Director of the Enforcement and Compliance Assurance Division, EPA Region 10, or an authorized representative.

"Director of the Water Division" means the Director of the Water Division, EPA Region 10, or an authorized representative.

"DMR" means discharge monitoring report.

"EPA" means the United States Environmental Protection Agency.

"Geometric Mean" means the nth root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

"Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.

"Inhibition concentration", IC, is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).

"Indirect Discharge" means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

"Industrial User" means a source of "Indirect Discharge."

"Interference" means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both: 1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and 2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

"LC₅₀" means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.

"Maximum daily discharge limitation" means the highest allowable "daily discharge."

"Method Detection Limit (MDL)" means the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.

"Minimum Level (ML)" means either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL). Minimum levels may be obtained in several ways: They may be published in a method; they may be sample concentrations equivalent to the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a lab, by a factor.

"National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and enforcing pretreatment requirements under Section 307, 402, 318, and 405 of the CWA.

"NOEC" means no observed effect concentration. The NOEC is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a chronic

toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).

"Pass Through" means an Indirect Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Receiving Water Concentration (RWC) is the concentration of a toxicant or effluent in the receiving water after mixing. The RWC is the inverse of the dilution factor. It is sometimes referred to as the instream waste concentration (IWC).

"QA/QC" means quality assurance/quality control.

"Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.

"Severe property damage" 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 that 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.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit 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.

"USC" means United States Code

"24-hour composite" sample means a combination of at least 8 discrete sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location, during the operating hours of a facility over a 24 hour period. The composite must be flow or time proportional. The sample aliquots must be collected and stored in accordance with procedures prescribed in 40 CFR 136.

APPENDIX A: MINIMUM LEVELS

The Table below lists the maximum Minimum Level (ML) for pollutants that may have monitoring requirements in the permit. The Permittee may request different MLs. The request must be in writing and must be approved by EPA. If the Permittee is unable to obtain the required ML in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit and a ML to EPA with appropriate laboratory documentation.

CONVENTIONAL PARAMETERS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Biochemical Oxygen Demand	2 mg/L	
Soluble Biochemical Oxygen Demand	2 mg/L	
Chemical Oxygen Demand	10 mg/L	
Dissolved Organic Carbon	1 mg/L	
Total Organic Carbon	1 mg/L	
Total Suspended Solids	5 mg/L	
Total Ammonia (as N)	50	
Dissolved oxygen	+/- 0.2 mg/L	
Temperature	+/- 0.2°C	
рН	N/A	

NONCONVENTIONAL PARAMETERS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Total Alkalinity	5 mg/L as CaCO3	
Chlorine, Total Residual	50.0	
Color	10 color units	
Fluoride (16984-48-8)	100	
Nitrate + Nitrite Nitrogen (as N)	100	
Nitrogen, Total Kjeldahl (as N)	300	
Soluble Reactive Phosphorus (as P)	10	
Phosphorus, Total (as P)	10	
Oil and Grease (HEM) (Hexane Extractable Material)	5,000	

NONCONVENTIONAL PARAMETERS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Salinity	3 practical salinity units or scale (PSU or PSS)	
Settleable Solids	500 (or 0.1 mL/L)	
Sulfate (as mg/L SO4)	0.2 mg/L	
Sulfide (as mg/L S)	0.2 mg/L	
Sulfite (as mg/L SO3)	2 mg/L	
Total dissolved solids	20 mg/L	
Total Hardness	200 as CaCO3	
Aluminum, Total (7429-90-5)	10	
Barium Total (7440-39-3)	2.0	
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)	2	
Boron Total (7440-42-8)	10.0	
Cobalt, Total (7440-48-4)	0.25	
Iron, Total (7439-89-6)	50	
Magnesium, Total (7439-95-4)	50	
Molybdenum, Total (7439-98-7)	0.5	
Manganese, Total (7439-96-5)	0.5	
Tin, Total (7440-31-5)	1.5	
Titanium, Total (7440-32-6)	2.5	

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
METALS, CYANIDE & TOTAL PHENOLS		
Antimony, Total (7440-36-0)	1.0	
Arsenic, Total (7440-38-2)	0.5	
Beryllium, Total (7440-41-7)	0.5	
Cadmium, Total (7440-43-9)	0.1	
Chromium (hex) dissolved (18540-29-9)	1.2	

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Chromium, Total (7440-47-3)	1.0	
Copper, Total (7440-50-8)	2.0	
Lead, Total (7439-92-1)	0.16	
Mercury, Total (7439-97-6)	0.0005	
Nickel, Total (7440-02-0)	0.5	
Selenium, Total (7782-49-2)	1.0	
Silver, Total (7440-22-4)	0.2	
Thallium, Total (7440-28-0)	0.36	
Zinc, Total (7440-66-6)	2.5	
Cyanide, Total (57-12-5)	10	
Cyanide, Weak Acid Dissociable	10	
Cyanide, Free Amenable to Chlorination (Available Cyanide)	10	
Phenols, Total	50	
2-Chlorophenol (95-57-8)	2.0	
2,4-Dichlorophenol (120-83-2)	1.0	
2,4-Dimethylphenol (105-67-9)	1.0	
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	2.0	
2,4 dinitrophenol (51-28-5)	2.0	
2-Nitrophenol (88-75-5)	1.0	
4-nitrophenol (100-02-7)	1.0	
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	2.0	
Pentachlorophenol (87-86-5)	1.0	
Phenol (108-95-2)	4.0	
2,4,6-Trichlorophenol (88-06-2)	4.0	
VOLATILE COMPOUND	OS	
Acrolein (107-02-8)	10	

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Acrylonitrile (107-13-1)	2.0	
Benzene (71-43-2)	2.0	
Bromoform (75-25-2)	2.0	
Carbon tetrachloride (56-23-5)	2.0	
Chlorobenzene (108-90-7)	2.0	
Chloroethane (75-00-3)	2.0	
2-Chloroethylvinyl Ether (110-75-8)	2.0	
Chloroform (67-66-3)	2.0	
Dibromochloromethane (124-48-1)	2.0	
1,2-Dichlorobenzene (95-50-1)	7.6	
1,3-Dichlorobenzene (541-73-1)	7.6	
1,4-Dichlorobenzene (106-46-7)	17.6	
Dichlorobromomethane (75-27-4)	2.0	
1,1-Dichloroethane (75-34-3)	2.0	
1,2-Dichloroethane (107-06-2)	2.0	
1,1-Dichloroethylene (75-35-4)	2.0	
1,2-Dichloropropane (78-87-5)	2.0	
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) (542-75-6) 6	2.0	
Ethylbenzene (100-41-4)	2.0	
Methyl bromide (74-83-9) (Bromomethane)	10.0	
Methyl chloride (74-87-3) (Chloromethane)	2.0	
Methylene chloride (75-09-2)	10.0	
1,1,2,2-Tetrachloroethane (79-34-5)	2.0	
Tetrachloroethylene (127-18-4)	2.0	
Toluene (108-88-3)	2.0	
1,2-Trans-Dichloroethylene	2.0	
(156-60-5) (Ethylene dichloride)	2.0	
1,1,1-Trichloroethane (71-55-6)	2.0	

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
1,1,2-Trichloroethane (79-00-5)	2.0	
Trichloroethylene (79-01-6)	2.0	
Vinyl chloride (75-01-4)	2.0	
BASE/NEUTRAL COMPOU	NDS	
Acenaphthene (83-32-9)	0.4	
Acenaphthylene (208-96-8)	0.6	
Anthracene (120-12-7)	0.6	
Benzidine (92-87-5)	24	
Benzyl butyl phthalate (85-68-7)	0.6	
Benzo(a)anthracene (56-55-3)	0.6	
Benzo(b)fluoranthene	1.6	
(3,4-benzofluoranthene) (205-99-2) 7	1.0	
Benzo(j)fluoranthene (205-82-3) 7	1.0	
Benzo(k)fluoranthene	1.6	
(11,12-benzofluoranthene) (207-08-9) 7		
Benzo(r,s,t)pentaphene (189-55-9)	1.0	
Benzo(a)pyrene (50-32-8)	1.0	
Benzo(ghi)Perylene (191-24-2)	1.0	
Bis(2-chloroethoxy)methane (111-91-1)	21.2	
Bis(2-chloroethyl)ether (111-44-4)	1.0	
Bis(2-chloroisopropyl)ether (39638-32-9)	0.6	
Bis(2-ethylhexyl)phthalate (117-81-7)	0.5	
4-Bromophenyl phenyl ether (101-55-3)	0.4	
2-Chloronaphthalene (91-58-7)	0.6	
4-Chlorophenyl phenyl ether (7005-72-3)	0.5	
Chrysene (218-01-9)	0.6	
Dibenzo (a,h)acridine (226-36-8)	10.0	
Dibenzo (a,j)acridine (224-42-0)	10.0	
Dibenzo(a-h)anthracene	1.6	

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
(53-70-3)(1,2,5,6-dibenzanthracene)		
Dibenzo(a,e)pyrene (192-65-4)	10.0	
Dibenzo(a,h)pyrene (189-64-0)	10.0	
3,3-Dichlorobenzidine (91-94-1)	1.0	
Diethyl phthalate (84-66-2)	7.6	
Dimethyl phthalate (131-11-3)	6.4	
Di-n-butyl phthalate (84-74-2)	1.0	
2,4-dinitrotoluene (121-14-2)	0.4	
2,6-dinitrotoluene (606-20-2)	0.4	
Di-n-octyl phthalate (117-84-0)	0.6	
1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	20	
Fluoranthene (206-44-0)	0.6	
Fluorene (86-73-7)	0.6	
Hexachlorobenzene (118-74-1)	0.6	
Hexachlorobutadiene (87-68-3)	1.0	
Hexachlorocyclopentadiene (77-47-4)	1.0	
Hexachloroethane (67-72-1)	1.0	
Indeno(1,2,3-cd)Pyrene (193-39-5)	1.0	
Isophorone (78-59-1)	1.0	
3-Methyl cholanthrene (56-49-5)	8.0	
Naphthalene (91-20-3)	0.6	
Nitrobenzene (98-95-3)	1.0	
N-Nitrosodimethylamine (62-75-9)	4.0	
N-Nitrosodi-n-propylamine (621-64-7)	1.0	
N-Nitrosodiphenylamine (86-30-6)	1.0	
Perylene (198-55-0)	7.6	
Phenanthrene (85-01-8)	0.6	
Pyrene (129-00-0)	0.6	

PRIORITY POLLUTANTS			
Pollutant & CAS No. (if available)	ML, μg/L unless specified		
1,2,4-Trichlorobenzene (120-82-1)	0.6		
DIOXIN			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16) (2,3,7,8 TCDD)	5 pg/L		
PESTICIDES/PCBs			
Aldrin (309-00-2)	0.05		
alpha-BHC (319-84-6)	0.05		
beta-BHC (319-85-7)	0.05		
gamma-BHC (58-89-9)	0.05		
delta-BHC (319-86-8)	0.05		
Chlordane (57-74-9)	0.05		
4,4'-DDT (50-29-3)	0.05		
4,4'-DDE (72-55-9)	0.05		
4,4' DDD (72-54-8)	0.05		
Dieldrin (60-57-1)	0.05		
alpha-Endosulfan (959-98-8)	0.05		
beta-Endosulfan (33213-65-9)	0.05		
Endosulfan Sulfate (1031-07-8)	0.05		
Endrin (72-20-8)	0.05		
Endrin Aldehyde (7421-93-4)	0.05		
Heptachlor (76-44-8)	0.05		
Heptachlor Epoxide (1024-57-3)	0.05		
PCB-1242 (53469-21-9)	0.5		
PCB-1254 (11097-69-1)	0.5		
PCB-1221 (11104-28-2)	0.5		
PCB-1232 (11141-16-5)	0.5		
PCB-1248 (12672-29-6)	0.5		
PCB-1260 (11096-82-5)	0.5		
PCB-1016 (12674-11-2)	0.5		

PRIORITY POLLUTANTS		
Pollutant & CAS No. (if available)	ML, μg/L unless specified	
Toxaphene (8001-35-2)	0.5	

APPENDIX B: PFAS CHEMICALS TO BE ANALYZED

Target Analyte Name	Abbreviation	CAS Number
Perfluoroalkyl carbo	xylic acids	
Perfluorobutanoic acid	PFBA	375-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluoroalkyl sulfonic ac	ids (acid form)	
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluoropentansulfonic acid	PFPeS	2706-91-4
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Fluorotelomer sulfo	nic acids	
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	4:2FTS	757124-72-4
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	6:2FTS	27619-97-2
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2FTS	39108-34-4
Perfluorooctane sulf	onamides	
Perfluorooctanesulfonamide	PFOSA	754-91-6
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids		
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols		
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2
Per- and Polyfluoroether carboxylic acids		

Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6	
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4	
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1	
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5	
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6	
Ether sulfonic a	cids		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9CI-PF3ONS	756426-58-1	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9	
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7	
Fluorotelomer carboxylic acids			
3-Perfluoropropyl propanoic acid	3:3FTCA	356-02-5	
2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	914637-49-3	
3-Perfluoroheptyl propanoic acid	7:3FTCA	812-70-4	