

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), 33 USC §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the “Act”,

City of Ketchikan, Alaska
Charcoal Point Wastewater Treatment Plant
Ketchikan, Alaska 99901

is authorized to discharge from the wastewater treatment facility located in Sitka, Alaska at the following location(s):

Outfall	Receiving Water	Latitude	Longitude
001	Tongass Narrows	55°21'21.8"N	131°42'09.8"W

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

This permit shall become effective [insert date]

This permit and the authorization to discharge shall expire at midnight, [insert date].

The permittee shall reapply for a permit reissuance on or before [insert date], 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

DRAFT

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 the EPA during the term of this permit:

Item	Due Date
Discharge Monitoring Reports (DMR)	DMRs are due monthly and must be postmarked on or before the 20th of the month following the monitoring period. (see Permit Part III.B.)
Quality Assurance Plan (QAP)	The permittee must provide the EPA with 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 the EPA and ADEC upon request.
Operation and Maintenance (O&M) Plan	The permittee must provide the EPA with 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 the EPA and ADEC upon request.
Compliance Schedule for Fecal Coliform and Enterococcus	The permittee must submit reports per the compliance schedule and annual reports per Permit Part II.C., including the deliverables required by the compliance schedule and the Annual Report of Progress.
Whole Effluent Toxicity Testing (WET) Report	The permittee must submit the results of the toxicity testing by January 31 of the following year, and with the next permit application (see Permit Part I.C.).
NPDES and 301(h) Application Renewal	The NPDES and 301(h) renewal 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 Applicant Questionnaire for Modification of Secondary Treatment Requirements, 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 January 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 in a Biological Monitoring Report annually by January 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 January 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).

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 Part II.D.2).
Nonindustrial Source Control Program	The permittee must submit an annual report on the nonindustrial source control program by January 31 st of the following year (see Permit Part II.D.3).
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 Parts I.B.3. and 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 the EPA that the plan has been developed and implemented within 180 days of the effective date of this permit (See Permit Part II.G.). The Plan must be kept on site and made available to the EPA and ADEC upon request.

Table of Contents

Schedule of Submissions.....	2
I. Limitations and Monitoring Requirements	6
A. Discharge Authorization	6
B. Effluent Limitations and Monitoring	6
C. Whole Effluent Toxicity (WET) Testing Requirements	13
D. Receiving Water Monitoring	17
E. Biological Monitoring for Benthic Infauna	20
II. Special Conditions	21
A. Operation and Maintenance Plan	21
B. Quality Assurance Plan (QAP)	22
C. Fecal Coliform and Enterococcus Schedule of Compliance	23
D. Toxics Control Program	26
E. Interim Beach Advisory	30
F. Emergency Response and Public Notification Plan.....	30
III. Monitoring, Recording and Reporting Requirements.....	31
A. Representative Sampling (Routine and Non-Routine Discharges)	31
B. Reporting of Monitoring Results	32
C. Monitoring Procedures	32
D. Additional Monitoring by permittee	32
E. Records Contents	32
F. Retention of Records.....	33
G. Twenty-four Hour Notice of Noncompliance Reporting.....	33
H. Other Noncompliance Reporting	35
I. Public Notification	35
J. Notice of New Introduction of Toxic Pollutants.....	35
K. Compliance Schedules.....	36
IV. Compliance Responsibilities.....	36
A. Duty to Comply.....	36
B. Penalties for Violations of Permit Conditions	36
C. Need to Halt or Reduce Activity not a Defense	38
D. Duty to Mitigate	38
E. Proper Operation and Maintenance	38
F. Bypass of Treatment Facilities.....	39
G. Upset Conditions	40
H. Toxic Pollutants	40
I. Planned Changes	40
J. Anticipated Noncompliance	41
K. Reopener	41
V. General Provisions.....	41
A. Permit Actions	41

B. Duty to Reapply	41
C. Duty to Provide Information	41
D. Other Information	41
E. Identification of the Initial Recipient for NPDES Electronic Reporting Data.....	42
F. Signatory Requirements.....	42
G. Availability of Reports	43
H. Inspection and Entry	43
I. Property Rights.....	44
J. Transfers.....	44
K. State Laws.....	44
VI. Definitions.....	45
APPENDIX A: Receiving Water Sampling Locations	49
APPENDIX B: Minimum Levels	51
 Table 1. Effluent Limitations and Monitoring Requirements	6
Table 2. PFAS Chemicals to be Analyzed	11
Table 3. Toxicity Test Species and Protocols	14
Table 4. Receiving Water Monitoring Requirements	17
Table 5. Tasks Required Under the Schedule of Compliance for Fecal Coliform and Enterococcus.....	23
Table 6. Additional Pollutants for Alaska 301(h) Facilities	26

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 the Frederick Sound, 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

1. The permittee must limit and monitor discharges from Outfall 001 as specified in Table 1. *Effluent Limitations and Monitoring Requirements*. 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

Parameter	Units	Effluent Limitations			Monitoring Requirements		
		Average Monthly Limit	Average Weekly Limit	Max Daily Limit	Sample Location	Sample Frequency	Sample Type
BOD ₅	mg/L	143	190	--	Influent and Effluent	1/week	24-hour composite
	lbs/day	4,770	6,338	--			Calculation ¹
BOD ₅ , % removal	%	Minimum 30% removal			Influent and Effluent	1/month	Calculation ²
Total Suspended Solids (TSS)	mg/L	49	65	--	Influent and Effluent	1/week	24-hour composite
	lbs/day	1,635	2,168	--			Calculation ¹
TSS, % removal	%	Minimum 30% removal			Influent and Effluent	1/month	Calculation ²
Enterococcus (Interim Limit)	#/100 mL	Report	--	Report	Effluent	1/week ³	Grab
Enterococcus ⁴	#/100 mL	690 ⁵	--	2,561 ⁶	Effluent	1/week ³	Grab

(Final Limit)		(geomean)		(instant. max)			
Fecal Coliform ⁷ (Interim Limit)	# FC/100 mL	810,000 ⁵ (geomean)	1,150,000 ⁵ (geomean)	1,200,000 ⁶ (instant. max)	Effluent	1/week ³	Grab
Fecal Coliform ⁴ (Final Limit)	# FC/100 mL	200 ⁵	400 ⁵	800 ⁶	Effluent	1/week ³	Grab
Copper, total recoverable	µg/L	39	--	62 ⁶	Effluent	1/month	24-hour composite
	lbs/day	1.29	--	2.07			Calculation ¹
Zinc, total recoverable	µg/L	552	--	1107 ⁶	Effluent	1/month	24-hour composite
	lbs/day	18.4	--	36.9			Calculation ¹
pH	s.u.	Between 6.5 – 8.5			Effluent	1/week	Grab
Dissolved Oxygen	mg/L	Between 5.0 – 17.0			Effluent	1/week	Grab
Monitoring Only							
Flow	mgd	Report	--	Report	Effluent	Continuous	Recorded
Temperature	°C	Report	--	Report	Effluent	1/week	Grab
Total Residual Chlorine	µg/L	Report		Report	Effluent	1/week ⁸	Grab
	lbs/day	Report		Report			Calculation ¹
Total Ammonia (as N)	mg/L	Report	--	Report	Effluent	1/month	24-hour composite
	lbs/day	Report	--	Report			Calculation ¹
Arsenic	µg/L	Report	--	Report		Quarterly	24-hour composite
	lbs/day	Report		Report		Quarterly	Calculation
Lead	µg/L	Report	--	Report		Quarterly	24-hour composite
	lbs/day	Report		Report		Quarterly	Calculation
Mercury	µg/L	Report	--	Report		Quarterly	24-hour composite

	lbs/day	Report		Report		Quarterly	Calculation
Nickel	µg/L	Report	--	Report		Quarterly	24-hour composite
	lbs/day	Report		Report		Quarterly	Calculation
Selenium	µg/L	Report	--	Report		Quarterly	24-hour composite
	lbs/day	Report		Report		Quarterly	Calculation
Silver	µg/L	Report	--	Report		Quarterly	24-hour composite
	lbs/day	Report		Report		Quarterly	Calculation
Whole Effluent Toxicity (WET) ⁹	TU _c	See Permit Part I.C.			Effluent	Quarterly ¹⁰	24-hour composite
Per-and Polyfluoroalkyl Substances (PFAS) ¹¹	ng/L	Report	--	Report	Influent, Effluent	2/year ¹²	24-hour composite
	mg/kg dry weight	--	--	Report	Sludge	2/year ¹²	Grab
Permit Application Effluent Testing Data ¹³	---				Effluent	1/year	---
Additional Effluent Testing – Chemical Analysis and Source Identification ¹⁴	---				Effluent	1/year	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 at approximately the same time.

(3) Between May and September of each year, fecal coliform and enterococcus sampling shall coincide with receiving water sampling in Permit Part I.D.

(4) Final fecal coliform and enterococcus limits. See Permit Part II.C. for compliance schedule information.

- (5) 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 $(100 \times 200 \times 300)^{1/3} = 181.7$.
- (6) Reporting is required within 24 hours of a maximum daily limit or instantaneous maximum limit violation. See Permit Parts I.B.3 and III.G.
- (7) See part IV.A.3 of the Fact Sheet for information on the interim fecal coliform limits.
- (8) Monitoring for total residual chlorine is only required when chlorine is used in the treatment process.
- (9) Chronic WET testing – See Permit Part I.C.
- (10) Toxicity testing must be conducted quarterly, except as provided in Permit Parts I.C.
- (11) See Permit Part I.B.9.
- (12) Monitoring for PFAS chemicals is required twice a year. One of the samples should occur between May through August, and the other between September through April, with at least two months between samples.
- (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.
- (14) Additional Effluent Testing – Chemical Analysis and Source Identification: See NPDES Permit Application Form 2A Table C, and Permit Part II.D., Table 6, for the list of pollutants to be included in this testing. The pollutants listed in Permit Part II.D., Table 6, must be reported in Table D of NPDES Permit Application Form 2A. The permittee must use sufficiently sensitive analytical methods in accordance with Permit Part I.B.5.

2. Narrative limitations for floating, suspended, or submerged matter:
 - a. There shall be no discharge of floating solids, visible foam or visible oily wastes.
3. The permittee must report within 24 hours any violation of the maximum daily limits for the following pollutants: fecal coliform, enterococcus, copper, or zinc. Violations of all other effluent limits are to be reported at the time that discharge monitoring reports are submitted (see Permit Part III.B, *Reporting of Monitoring Results*, and Part 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 which 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. *Effluent Limitations and Monitoring Requirements*.
 - 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.
- iii. 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.

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 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. Additional pollutants required for application: In addition to the pollutants listed in Tables B and C of NPDES Application Form 2A, the permittee must include the results of the pollutants listed in Table 6. *Additional Pollutants for Alaska 301(h) Facilities* in permit application testing (see Permit Part II.D.). Results must be reported in Table D of NPDES Application Form 2A.
- 9. 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 Table 2. *PFAS Chemicals to be Analyzed*.
 - 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.g. at least once for the PFAS chemicals listed in Table 2. *PFAS Chemicals to be Analyzed*, by four years after the effective date of the final permit. Results of the industrial user sampling must be reported to the 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_AK0021440_Industrial Sampling_Survey_52799, where YYYY_MM_DD is the date that the permittee submits the written notification.

Table 2. PFAS Chemicals to be Analyzed		
Target Analyte Name	Abbreviation	CAS Number
Perfluoroalkyl carboxylic 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	PFDaA	307-55-1
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluoroalkyl sulfonic acids (acid form)		
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluoropentanesulfonic 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 sulfonic 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 sulfonamides		
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 acids		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-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

C. Whole Effluent Toxicity (WET) Testing Requirements

The permittee must conduct chronic toxicity tests on effluent samples from Outfall 001 in accordance with Permit Parts I.C while the permit remains in effect.

1. Sampling Frequency

- a. Toxicity testing must be conducted quarterly, except as provided in Permit Parts I.C.1.b and I.C.4. 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.
- b. If eight consecutive quarterly WET tests conducted over a 24-month period do not exceed 19.7 TU_c, the monitoring frequency may be reduced to annually.
- c. 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.
- d. 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

- a. 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. Toxicity testing must be conducted on 24-hour composite samples of effluent. In addition, a split of each sample collected must be analyzed for the chemical and physical parameters required in Permit Part I.B, *Effluent Limitations and Monitoring*, 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.
- c. For the first four quarterly tests, the permittee must conduct the following chronic toxicity tests on each sample, using the species and protocols identified below in Table 3. *Toxicity Test Species and Protocols*. For all subsequent tests, testing must be conducted using the most sensitive of the three tests.

Table 3. Toxicity Test Species and Protocols		
Test Type	Species	Method
Topsmelt 7-day Larval Growth and Survival Test	<i>Atherinops affinis</i>	EPA/600/R/95-136 Method 1006.0
Bivalve Embryo-larval Development Test	<i>Crassostrea gigas</i> - (Pacific oyster)*, or <i>Mytilus galloprovincialis</i> - (blue mussel)*	EPA/600/R/95-136 Method 1005.0
Echinoderm Larval Development Test	<i>Strongylocentrotus purpuratus</i> - (purple sea urchin)*, or <i>Dendraster excentricus</i> - (sand dollar)*	EPA/600/R/95-136 Section 15
*Either species may be used, depending on supplier availability		

- d. 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).
- e. The presence of chronic toxicity must be determined as specified in the 1995 West Coast WET Manual identified in Permit Part I.C.2.d.
- f. 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).

3. Chronic WET Trigger

- a. The chronic WET permit trigger is 19.7 TUc.
- b. If the result of any WET test conducted in accordance with Permit Part I.C.1 above exceeds the trigger in Permit Part I.C.3.a above, 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, the 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, the 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.c the permittee must revert to the quarterly testing frequency specified in Permit Part I.C.1.a. until the conditions of Permit Part I.C.1.b. are satisfied.
5. Quality Assurance
- a. The toxicity testing on each organism must include the following dilution series: 25%, 10%, 5%, 2.5%, 1.25% effluent and a control (0% effluent).
 - b. 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:
 - i. If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, 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.
 - d. 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 the EPA. In no case shall water that has not met test acceptability criteria be used for either dilution or control.
6. Reporting
- a. The permittee must submit the results of the toxicity testing as an attachment to the December NetDMR. The file name of the electronic attachment must be as follows:
YYYY_MM_DD_AK0021440_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. The permittee shall notify the EPA 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 also meet the following requirements:

1. The following parameters identified in Table 4. *Receiving Water Monitoring Requirements*, shall be measured at the locations and frequencies specified.

Table 4. Receiving Water Monitoring Requirements					
Parameter	Units	Sample Type	Sample Depth	Frequency	Location
Temperature	°C	Grab	Surface, every 5m to bottom	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³
Salinity	ppt	Grab	Surface, every 5m to bottom	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³
Dissolved Oxygen	mg/L	Grab	Surface, every 5m to bottom	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³
pH	Standard units	Grab	Surface, every 5m to bottom	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³
Oil and Grease ⁴	Visual	Visual	Surface	Annually (August or September)	ZID Station ¹ , ZID Boundary ²
Secchi Disk Depth	Feet	Visual	Per Method	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³

Turbidity	NTU	Grab	Surface, every 5m to bottom	Annually (August or September)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³
Fecal Coliform	#/100 mL	Grab	Surface (or just below)	Monthly ^{5,6} (May to August)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³ , Additional Sites ⁶
Enterococcus	#/100mL	Grab	Surface (or just below)	Monthly ⁵ (May to August)	ZID Station ¹ , ZID Boundary ² , Reference Sites ³ , Additional Sites ⁷
Biological Monitoring for Benthic Infauna and Sediment Analysis	Per method	Grab	Per method	Once every 5 years ⁸	ZID Station ¹ , ZID Boundary ² , Reference Sites ³

(1) See Permit Part I.D.2.a.

(2) See Permit Part I.D.2.b.

(3) See Permit Part I.D.2.c.

(4) Observations must include the date, time, and whether there is presence of floating solids, visible foam or visible oily wastes which produce a sheen on the surface of the receiving water.

(5) Monitoring is required once a month in May, June, July, and August. Fecal Coliform and enterococcus sampling shall coincide with effluent sampling in Permit Part I.B.

(6) Receiving water monitoring for fecal coliform can be discontinued if the permittee achieves 12 consecutive months of compliance with the final fecal coliform limits. 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.

(7) See Permit Part I.D.2.d.

(8) Biological monitoring shall be conducted in August of the fourth year of the permit and every five years thereafter.

2. Monitoring stations must be established in Tongass Narrows at the following locations:

- a. Zone of Initial Dilution (ZID) Station (Site 1): One station shall be located over the center point of the diffuser. Samples must be analyzed for all parameters in Table 4.

The coordinates of the ZID Station are: 55.356094, -131.702829

- b. ZID Boundary (Sites 2, 3, 4, 5): Four stations shall be located at the ZID boundary. The station coordinates of the ZID boundary are:

Site 2 (middle of NW ZID boundary): 55.356357 -131.703036

Site 3 (middle of NE ZID boundary): 55.356328 -131.701938

Site 4 (middle of SE ZID boundary): 55.355828 -131.702631

Site 5 (middle of SW ZID boundary): 55.355860 -131.703720

The EPA has established the spatial dimensions of the ZID to include the entire water column within a rectangle 64 meters long (parallel to the shore) and 125 meters wide (perpendicular to shore) centered on the diffuser. Samples must be analyzed for all parameters in Table 4.

- c. Reference Sites: Two stations will be reference stations, one located approximately 1500 meters north-northwest of the outfall and one located approximately 1500 meters south-southwest of the outfall.

The coordinates of the reference sites are:

Reference Site 1: 55.346533, -131.683517

Reference Site 2: 55.367950, -131.722233

- d. Additional Sites: Two additional stations close to the shoreline on either side of the discharge. Samples must be analyzed for parameters as indicated in Table 4. The existing established sampling sites shall be maintained when possible.

Shoreline Site 1: 55.364473, -131.711685

Shoreline Site 2: 55.352208 -131.689518

- 3. Sampling stations shall be established using an electronic navigational aid to ensure the same sampling stations are used during subsequent sampling events. The permittee may propose alternate reference station locations and submit them for the 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 4, 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 the EPA.
- 8. Quality assurance/quality control (QA/QC) plans for all the surface water monitoring must be documented in the Quality Assurance Plan 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 Monitoring Data
 - a. The permittee must submit all receiving water monitoring results for the previous calendar year for all parameters in an annual Surface Water Monitoring report to the EPA by January 31st of the following year and with the NPDES renewal application in Permit Part V.B, *Duty to Reapply*, of this permit. 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_AK0021440_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 emailed to the National Marine Fisheries Service (NMFS) at: akr.prd.records@noaa.gov, with "AKRO2021-03537 – Mitigation Measures Reporting for Ketchikan," as the email subject line.

E. Biological Monitoring for Benthic Infauna

1. A benthic survey shall be conducted in August of the fourth year of the permit and every five years thereafter. 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. The benthic survey shall be conducted at the following three locations:

Benthic Site 1 – ZID: 55.356094, -131.702829

Benthic Site 2 – ZID Boundary: 55.356357, -131.703036

Benthic Site 3 – Reference Site: 55.367950, -131.722233

To the extent possible, sampling shall occur at the same stations that were sampled during the previous survey.

3. Three replicate benthic samples shall be collected from each sampling location.
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. below. 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 results and data to the EPA in the form of a written report by January 31 of the following year as an attachment to NetDMR, and with the NPDES renewal application in Permit Part V.B, *Duty to Reapply*. The file name of the electronic attachment must be as follows:
YYYY_MM_DD_AK0021440_SUPMR, where YYYY_MM_DD is the date the permittee submits the report. A copy of the biological monitoring report shall also be emailed to the National Marine Fisheries Service (NMFS) at:
akr.prd.records@noaa.gov, with "AKRO2021-03537 – Mitigation Measures Reporting for Ketchikan," as the email subject line.

II. SPECIAL CONDITIONS

A. Operation and Maintenance Plan

1. In addition to the requirements specified in Permit Part IV.E, *Proper Operation and Maintenance*, 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 section. Any changes occurring in the operation of the plant must be reflected within the O&M Plan.
2. Within 180 days of the effective date of this permit, the permittee must submit written notice to the EPA that the O&M Plan has been developed and implemented.

3. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_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)

1. The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. Any existing QAPs may be modified for compliance with this section.
2. Within 180 days of the effective date of this permit, the permittee must submit written notice to the EPA that the QAP has been developed and implemented. The permittee may submit written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_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 the EPA and ADEC upon request.
3. 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.
4. 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.
5. 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 Part 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.

6. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
7. Copies of the QAP must be retained on site and made available to the EPA and ADEC upon request.

C. Fecal Coliform and Enterococcus Schedule of Compliance

1. The permittee must achieve compliance with the fecal coliform and enterococcus limitations of Permit Part I.B., 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 Part I.B. and maintain the shoreline signs advising the public about the existence of the mixing zone and the consumption of raw shellfish from the mixing zone is not advised.
3. Until compliance with the effluent limits is achieved, the permittee must complete the tasks and reports listed in Table 5.

Table 5. Tasks Required Under the Schedule of Compliance for Fecal Coliform and Enterococcus		
Task No.	Due By	Task Activity
1	1 year from effective date of the permit	<p>Facility Planning</p> <p>The permittee must develop a facility plan that evaluates alternatives to meet the final effluent limits for fecal coliform and enterococcus and select a preferred alternative by one year after the effective date of the permit.</p> <p>Deliverable: The facility plan must be submitted to EPA and ADEC no later than one year and 14 days after the effective date of the permit. The permittee must provide written notice to EPA that the facility plan has been submitted to ADEC for the necessary approvals. The permittee must submit the plan as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_Plan_43699, where YYYY_MM_DD is the date that the permittee submits the plan.</p>

Table 5. Tasks Required Under the Schedule of Compliance for Fecal Coliform and Enterococcus		
Task No.	Due By	Task Activity
2	2 years from the effective date of the permit	<p>Final Design</p> <p>The permittee must complete design of the selected alternative and request approval to construct from ADEC's Engineering Support and Plan Review (ESPR) by two years after the effective date of the permit.</p> <p>Deliverable: The permittee must submit the final design to EPA and ADEC no later than two years and 14 days after the effective date of the permit. The permittee must submit the final design as an attachment to NetDMR. The file name of the attachment must be as follows: YYYY_MM_DD_AK0021440_Plan_90408, where YYYY_MM_DD is the date that the permittee submits the written notification.</p>
3	3 years from the effective date of the permit	<p>Funding and Contractor Selection</p> <p>The permittee must secure funding and select a contractor to construct upgrades by three years after the effective date of the permit.</p> <p>Deliverable: The permittee must provide written notice to EPA and ADEC no later than three years and 14 days after the effective date of the final permit, that funding has been secured and the bid award is complete. The permittee must submit the written notification(s) as an electronic notification to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_bid_CS014, where YYYY_MM_DD is the date that the Permittee submits the written notification.</p>

Table 5. Tasks Required Under the Schedule of Compliance for Fecal Coliform and Enterococcus		
Task No.	Due By	Task Activity
4	4 years from the effective date of the permit	<p>Construction Begins</p> <p>The permittee must begin construction to achieve the final fecal coliform and enterococcus effluent limits by four years after the effective date of the permit.</p> <p>Deliverable: The permittee must submit a construction completed report to EPA and ADEC no later than four years and 14 days after the effective date of the permit. The permittee must submit the report as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_Construct_90408, where YYYY_MM_DD is the date that the permittee submits the report. end EPA and ADEC written notification that construction has begun, no later than four years and 14 days after the effective date of the final permit.</p>
5	5 years from the effective date of the permit	<p>Meet Effluent Limits for Fecal Coliform and Enterococcus</p> <p>The permittee must complete construction and optimize facility upgrade operations, such that compliance with the final fecal coliform and enterococcus effluent limits are achieved by five years after the effective date of the permit.</p> <p>Deliverable: The permittee must do the following no later than five years and 14 days after the effective date of the permit:</p> <ol style="list-style-type: none"> 1) The permittee must request final approval to operate from ADEC's ESPR 2) The permittee must provide EPA and ADEC with sampling results and written notice that the fecal coliform and enterococcus effluent limits are achieved. The permittee must 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_AK0021440_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 that outlines the progress made towards reaching the compliance date for the fecal coliform and enterococcus effluent limitations. At a minimum, the annual report must include:
 - a. An assessment of the previous year of fecal coliform and enterococcus data and comparison to the effluent limitations.

- b. A report on progress made towards meeting the effluent limitations, including the applicable deliverable required in Table 5. *Tasks Required Under the Schedule of Compliance for Fecal Coliform and Enterococcus.*
 - c. Further actions and milestones targeted for the upcoming year.
5. The annual Report of Progress must be submitted by one year after the effective date of this permit each year. The first report is due one year after the effective date of this permit and annually thereafter, until compliance with the fecal coliform and enterococcus effluent limits is achieved. The permittee may submit the annual report as an attachment to the DMR. The file name of the electronic attachment must be as follows:
YYYY_MM_DD_AK0021440_Progress_CS010, where YYYY_MM_DD is the date that the permittee submits the written report. See also Permit Part III.K., *Compliance Schedules.*

D. Toxics Control Program

1. Chemical Analysis and Source Identification
 - a. The permittee must analyze its effluent for all toxic substances and pesticides identified in the NPDES Permit Application Form 2A Table C and in Table 6 below. Testing must be conducted annually during alternating quarters. The additional effluent testing must occur on the same day whole effluent toxicity testing in Permit Part I.C. 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. Effluent must be analyzed annually while the permit remains in effect, once during the wet weather season and once during the dry weather season, with one instance of testing occurring during the 2nd year after the effective date of the permit and another instance during the 4th year after the effective date of the permit. The analyses must be conducted on 24-hour composite samples of effluent. The permittee must use sufficiently sensitive methods in accordance with Permit Part I.B.7.

Table 6. Additional Pollutants for Alaska 301(h) Facilities	
4,4'-DDT*	Alpha-endosulfan
Aldrin	Chlordane
Beta-endosulfan	Endosulfan sulfate
Dieldrin	Endrin aldehyde
Endrin	Heptachlor epoxide
Heptachlor	Malathion*
Lindane	Toxaphene

Total polychlorinated biphenyls (PCBs)	Asbestos*
DDE* (metabolite of DDT)	2,3,7,8-TCDD*
Demeton*	Guthion*
Mirex*	Methoxychlor*
Parathion*	
*40 CFR 401.15	

- b. The permittee shall provide an analysis of the known or suspected sources of any toxic substances or pesticides identified during the effluent analyses from Permit Part II.D.1.a above. The analysis shall to the extent practicable categorize the sources according to industrial and nonindustrial types.
 - c. The results of the effluent analyses and source identification must be submitted as an electronic attachment to the following January'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_AK0021440_Toxics Scan_02999, where YYYY_MM_DD is the date that the permittee submits the written notification.
 - d. Unless required by ADEC, 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*;
 - ii. 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;
 - iv. 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 that 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 5 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;

- vi. Which industrial users are subject only to local requirements; and
 - 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., 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 permit renewal application in 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_AK0021440_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:
 - 1. 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);
 - 2. 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
 - 3. 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_AK0021440_Municipal Code." The file name of the electronic attachment must be as follows:
YYYY_MM_DD_AK0021440_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 signed certification with the NPDES and 301(h) 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 WWTP. Elements of the public education program must include the development and distribution 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. The public education program must be implemented each year; and
- b. An annual report on the nonindustrial source control program shall be submitted by January 20th of the following year as an electronic attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_NISCP_ANNRP, where YYYY_MM_DD is the date that the permittee submits the written notification. The report shall summarize the actions taken, and their effectiveness to control nonindustrial sources of toxic pollutants and pesticides.

E. Interim Beach Advisory

- a. 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:

- a. 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;
 - b. 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;
 - c. 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.
2. The permittee must submit written notice to the EPA and ADEC 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 section.
 3. The permittee may submit the written notification as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD AK0021440_ERPNP, 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 the EPA and ADEC upon request.

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

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

- a. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- b. 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.
- c. 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.
- d. 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., *Monitoring Procedures*. The

permittee must report all additional monitoring in accordance with Permit Part III.D., *Additional Monitoring by permittee*.

B. Reporting of Monitoring Results

1. The permittee must submit monitoring data and other reports electronically using NetDMR (<https://npdes-ereporting.epa.gov/net-netdmr>).
2. Monitoring data must be submitted electronically to the EPA no later than the 20th of the month following the completed reporting period.
3. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Permit Part V.F., *Signatory Requirements*.
4. The permittee must submit copies of the DMRs and other reports to ADEC.
5. Submittal of Reports as NetDMR Attachments. Unless otherwise specified in this permit, the permittee must submit all reports to the 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_AK0021440_Report Type Name_Identifying Code where YYYY_MM_DD is the date that the permittee submits the attachment.
6. 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 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 the 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;
2. 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 the EPA or ADEC at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. 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, *Bypass of Treatment Facilities*);
 - c. any upset that exceeds any effluent limitation in the permit (See Permit Part IV.G., *Upset Conditions*); or
 - d. any violation of a maximum daily discharge limitation for applicable pollutants identified by Permit Part I.B.3.
 - 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:
 - i. 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., *Signatory Requirements*. Reports must be submitted via email to R10enforcement@epa.gov with the subject line "CWA NPDES_AK0021440_Noncompliance Report." The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_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 section 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 section and 40 CFR Part 3 (including, in all cases, Subpart D to Part 3), 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., *Reporting of Monitoring Results* 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 section 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 section and 40 CFR Part 3 (including, in all cases, Subpart D to Part 3), 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 section.

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.G., *Emergency Response and Public Notification Plan*.

J. Notice of New Introduction of Toxic Pollutants

1. The permittee must provide adequate notice to the Director of the Water Division of the following:
 - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants; and
 - b. 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.
 - c. For the purposes of this section, adequate notice must include information on:
 - i. The quality and quantity of effluent to be introduced into the POTW, and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
2. The permittee must notify the Director of the Water Division via email at

EPAR10WD-NPDES@epa.gov with the subject line “CWA NPDES_AK0021440_New Pollutants.” The file name of the electronic attachment must be as follows: YYYY_MM_DD_AK0021440_New Pollutants, where YYYY_MM_DD is the date that the permittee submits the notice.

K. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted to the EPA and ADEC no later than 14 days following each schedule date.

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 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any such sections in a permit issued under CWA 402, or any requirement imposed in a pretreatment program approved under CWA 402(a)(3) or 402(b)(8), is subject to a civil penalty not to exceed the maximum amounts authorized by CWA 309(d) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 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 U.S.C. 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 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 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 309(g)(2)(A) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 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 U.S.C. 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 309(g)(2)(B) and the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. 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 U.S.C. 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 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any of such sections in a permit issued under CWA 402, or any requirement imposed in a pretreatment program approved under CWA 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 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 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 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 section 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 section and 40 CFR Part 3 (including, in all cases, Subpart D to Part 3), § 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., *Twenty-four Hour Notice of Noncompliance Reporting*. 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 section 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 section and 40 CFR Part 3 (including, in all cases, Subpart D to Part 3), § 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:
 - i. 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 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 CWA § 307(a) and with standards for sewage sludge use or disposal established under CWA § 405(d) 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 CWA § 405(d). 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 the EPA and ADEC, within the time specified in the request, any information that the 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 the 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 the 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 the EPA, and as defined in 40 CFR 127.2(b). The 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)]. The EPA will update and maintain this listing.

F. Signatory Requirements

All applications, reports or information submitted to the EPA or 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.
2. All reports required by the permit and other information requested by the 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 section, 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 the 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, the 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:

1. 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;

3. 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 CWA § 510.

VI. DEFINITIONS

1. "Act" means the Clean Water Act.
2. "ADEC" means Alaska Department of Environmental Conservation.
3. "Administrator" means the Administrator of the EPA, or an authorized representative.
4. Approval Authority means the Regional Administrator of EPA Region 10, or an authorized representative.
5. "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.
6. "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.
7. "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.
8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
9. "Chronic toxic unit" ("TUC") is a measure of chronic toxicity. TUC is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., $100/\text{"NOEC"}$).
10. "Composite" - see "24-hour composite".
11. "CWA" means the Clean Water Act, 33 U.S.C. 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.
12. "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.

13. "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.
14. "Director of the Water Division" means the Director of the Water Division, EPA Region 10, or an authorized representative.
15. "DMR" means discharge monitoring report.
16. "EPA" means the United States Environmental Protection Agency.
17. "Geometric Mean" means the n^{th} root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
18. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
19. "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).
20. "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.
21. "Industrial User" means a source of "Indirect Discharge."
22. "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.
23. "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.
24. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
25. "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.

26. "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.
27. "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 CWA §§ 307, 402, 318, and 405.
28. "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).
29. "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).
30. "QA/QC" means quality assurance/quality control.
31. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
32. 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).
33. "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 which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
34. "Significant Industrial User" is all Industrial Users subject to Categorical Pretreatment Standards, and any other Industrial User that discharges an average of 25,000 average gallons per day or more of process wastewater to the POTW; contributes a process Wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW, or is designated as such by the Control Authority on the basis that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or requirement, except as provided in 40 CFR 403.3(v).

35. "Slug discharge" is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has the reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits, or Permit conditions.
36. "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.
37. "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 proportional. The sample aliquots must be collected and stored in accordance with procedures prescribed in 40 CFR 136.

Legend

- Sampling Location
- Diffuser
- Outfall
- └─┘ Zone of Initial Dilution

Name	Lat (dd.ddd)	Long (-ddd.ddd)
ZID Station (Site 1): Center point of the 200-ft diffuser	55.356094	-131.702829
Site 2 Middle of NW ZID boundary line	55.356357	-131.703036
Site 3 Middle of NE ZID boundary line	55.356328	-131.701938
Site 4 Middle of SE ZID boundary line	55.355828	-131.702631
Site 5 Middle of SW ZID boundary line	55.355860	-131.703720
Shoreline Site 1	55.364473	-131.711685
Shoreline Site 2	55.352208	-131.689518
Reference Site 1	55.346533	-131.683517
Reference Site 2	55.367950	-131.722233

250 500 1,000 Feet

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Receiving Water Sampling Locations Map
Ketchikan Wastewater Treatment Plant
NPDES Permit AK0021440 (Zoomed In Extent)



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Receiving Water Sampling Locations Map Ketchikan Wastewater Treatment Plant NPDES Permit AK0021440 (Zoomed Out Extent)



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APPENDIX B: MINIMUM LEVELS

The Tables below list 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 (MDL) and an 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
Total Suspended Solids	5 mg/L
Dissolved oxygen	+/- 0.2 mg/L
Temperature	+/- 0.2°C
pH	N/A

NONCONVENTIONAL PARAMETERS

Pollutant & CAS No. (if available)	ML, µg/L unless specified
Chlorine, Total Residual	50.0
Salinity	3 practical salinity units or scale (PSU or PSS)

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
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

Pollutant & CAS No. (if available)	ML, µg/L unless specified
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 COMPOUNDS	
Acrolein (107-02-8)	10
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

Pollutant & CAS No. (if available)	ML, µg/L unless specified
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 (156-60-5) (Ethylene dichloride)	2.0
1,1,1-Trichloroethane (71-55-6)	2.0
1,1,2-Trichloroethane (79-00-5)	2.0
Trichloroethylene (79-01-6)	2.0
Vinyl chloride (75-01-4)	2.0
BASE/NEUTRAL COMPOUNDS	
Acenaphthene (83-32-9)	0.4
Acenaphthylene (208-96-8)	0.6
Anthracene (120-12-7)	0.6
Benzidine (92-87-5)	24

Pollutant & CAS No. (if available)	ML, µg/L unless specified
Benzyl butyl phthalate (85-68-7)	0.6
Benzo(a)anthracene (56-55-3)	0.6
Benzo(b)fluoranthene (3,4-benzofluoranthene) (205-99-2) 7	1.6
Benzo(j)fluoranthene (205-82-3) 7	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) (207-08-9) 7	1.6
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 (53-70-3)(1,2,5,6-dibenzanthracene)	1.6
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

Pollutant & CAS No. (if available)	ML, µg/L unless specified
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
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

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