

United States Environmental Protection Agency
 Region 10
 1200 Sixth Avenue, Suite 900
 Seattle, Washington 98101

Authorization to Discharge Under the National Pollutant Discharge Elimination System

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

City of North Pole, Alaska

is authorized to discharge from the North Pole Wastewater Treatment facility located in North Pole, AK, at the following location(s):

Outfall	Receiving Water	Latitude	Longitude
001	Tanana River	64° 44' 38.042”	147° 22' 57.463”

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

A copy of this permit shall be kept at the facility where discharges occur.

This permit shall become effective **June 1, 2008**.

This permit and the authorization to discharge shall expire at midnight, **May 31, 2013**.

The permittee shall reapply for a permit reissuance on or before **December 2, 2012**, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 14th day of April, 2008,

_____/s/ Christine Psyk for_____
 Michael F. Gearheard, Director
 Office of Water and Watersheds

Final Permit

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Schedule of Submissions

<u>Item</u>	<u>Due Date</u>
1. Discharge Monitoring Reports (DMR)	Submit DMRs monthly postmarked by the 15 th day of the month. (§III.B)
2. Sulfolane Test Procedure	Submit within 60 days of the effective date of this permit to the EPA pretreatment coordinator at the address in §II.B.6.a, below, a detailed description of the test procedure for sulfolane, which the City is using, with references to published studies of the applicability of the procedure to the pollutant in question. (§II.A.5.d(1))
3. Quality Assurance Plan (QAP)	Provide EPA and Alaska Department Of Environmental Conservation (ADEC) with written notification that the Quality Assurance Plan has been developed and implemented within 90 days after the effective date of the permit (§II.C). The Plan must be kept on site and made available to EPA and ADEC upon request. (§II.C.5)
4. Posting of Sign	Post a sign on the shoreline near the outfall and mixing zone with 90 days after the effective date of the permit (§II.D)
5. Operations and Maintenance (O&M) Plan	Develop and implement an Operations and Maintenance (O&M) Plan and provide EPA and ADEC with written notification that the O&M Plan has been developed and implemented within 180 days after the effective date of the permit (§II.B). The Plan must be kept on site and made available to EPA and ADEC upon request.
6. Overflow Emergency Response and Public Notification Plan	Submit written notice to EPA and ADEC that the Overflow Emergency Response and Public Notification Plan has been developed and implemented within 180 of the effective date of this permit.(§II.D.2)
7. Toxicity Reduction Evaluation Workplan	Submit TRE workplan [1-2 pages] within 180 days of the effective date of this permit or at least two weeks before the first WET test is conducted, whichever is sooner. (§I.C.3.a)
8. Surface Water Monitoring	Submit results from surface water monitoring with the next DMR after receiving test results.(§I.D)
9. Twenty-Four Hour Notice of Noncompliance Reporting	Report certain occurrences of noncompliance, including upsets, by telephone within 24 hours from the time the permittee becomes aware of the circumstances. (§III.G, §IV.G, and §I.B, Table 1, footnote 3). The permittee shall submit notice of an unanticipated bypass within 24 hours.(§IV.F)

<u>Item</u>	<u>Due Date</u>
10. Effluent Testing and Expanded Effluent Data	Submit results from Form 2A Effluent Testing and Expanded Effluent Testing with the next DMR after receiving test results. (§I.B, Table 1)
11. Toxicity Testing Data	Submit results from Toxicity Testing with the next DMR after receiving test results. (§I.C)
12. Pretreatment Program Development	<p>Within 6 months after the effective date of this permit, submit to EPA for approval the results of an industrial user survey. (§II.A.1.a)</p> <p>Within 12 months after the effective date of this permit, submit drafts of a sewer use ordinance and legal authorities. (§II.A.2.b)</p> <p>Within 18 months after the effective date of this permit, submit description of permits, inspection, monitoring, and other program procedures, enforcement response plan, description of resources, equipment & personnel necessary, including funding plans. (§II.A.2.c)</p> <p>Within 21 months after the effective date of this permit, submit for approval and request to implement the complete approvable Industrial Pretreatment Program. (§II.A.2.d)</p> <p>Within one month after approval, implement and enforce the Industrial Pretreatment Program. (§II.A.2.e)</p>
13. Annual Pretreatment Report	Submit the annual pretreatment report no later than January 31 of each year. (§II.A.6)
14. NPDES Application Renewal	Submit the application for a subsequent permit at least 180 days before the expiration date of this permit (§V.B).

I. Limitations and Monitoring Requirements

A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the specified outfall to the Tanana River, within the limits and subject to the conditions set forth in this permit. 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 Requirements

The permittee must limit and monitor discharges from outfall 001 as specified in Table 1, below. All limits represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits in the tables 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	Effluent Limitations				Monitoring Requirements		
	Average Monthly Limit	Average Weekly Limit	Average Monthly Minimum Removal	Maximum Daily Limit	Sample Location	Sample Frequency	Sample Type
Flow	---	---	---	0.5 MGD	Effluent	Continuous	Recording
Biochemical Oxygen Demand (BOD ₅)	30 mg/l	45 mg/l	---	60 mg/l	Influent and Effluent	2/month	grab
	---	---	85% ¹	---	---	---	Calculation ¹
	125.1 lbs/day ²	187.6 lbs/day ²	---	250.2 lbs/day ²	--	--	Calculation ²
Total Suspended Solids (TSS)	30 mg/l	45 mg/l	---	60 mg/l	Influent and Effluent	2/month	grab
	---	---	85% ¹	---	---	---	Calculation ¹
	125.1 lbs/day ²	187.6 lbs/day ²	---	250.2 lbs/day ²	--	--	Calculation ²
Fecal Coliform Bacteria	200/100 ml ³	400/100 ml	---	800/100 ml ⁴	Effluent	2/month	Grab
Total Residual Chlorine	0.5 mg/l	0.75 mg/l	---	1.00 mg/l ⁴	Effluent	5/week	Grab
	2.1 lbs/day ²	3.1 lbs/day ²	---	4.2 lbs/day ^{2,4}	--	--	Calculation ²

Table 1							
Effluent Limitations and Monitoring Requirements							
Parameter	Effluent Limitations				Monitoring Requirements		
	Average Monthly Limit	Average Weekly Limit	Average Monthly Minimum Removal	Maximum Daily Limit	Sample Location	Sample Frequency	Sample Type
pH	6.0 to 9.0 s.u. at all times				Effluent	5/week	Grab
Dissolved oxygen	--	--	--	2.0 mg/l ⁵ minimum	Effluent	1/week	Grab
Total Aqueous Hydrocarbons (TAqH)	--	--	--	15 µg/l ⁴	Effluent	2/month	Grab ⁶
Total Aromatic Hydrocarbons (TAH),	--	--	--	10 µg/l ⁴	Effluent	2/month	Grab ⁶
Total Ammonia as N, mg/l	---	---	---	---	Effluent	1/quarter	Grab
Oil & Grease, mg/l	--	--	--	--	Effluent	1/year	Grab
Arsenic ⁷ , mg/l	---	---	---	---	Influent	2/year	Composite
					Effluent		Grab
Cadmium ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Chromium ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Copper ⁷ , mg/l	---	---	---	---	Influent	1/quarter	composite
					Effluent		Grab
Cyanide ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Lead ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Mercury ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Molybdenum ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Nickel ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab

Table 1
Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations				Monitoring Requirements		
	Average Monthly Limit	Average Weekly Limit	Average Monthly Minimum Removal	Maximum Daily Limit	Sample Location	Sample Frequency	Sample Type
Selenium ⁷ , mg/l	---	---	---	---	Influent	1/quarter	composite
					Effluent		Grab
Silver ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Zinc ⁷ , mg/l	---	---	---	---	Influent	2/year	composite
					Effluent		Grab
Hardness (as CaCO ₃), mg/l	---	---	---	---	Effluent	1/quarter	Grab
Sulfolane ⁷ , mg/l	---	---	---	---	Influent	1/month ⁸	composite
					Effluent		Grab
Form 2A ⁹ Whole Effluent Toxicity Testing	---	---	---	---	Effluent	4 in the 1 st 4½ yrs ¹⁰	Grab
Form 2A ⁹ §B6 Effluent Testing	--	--	--	--	Effluent	3 in the 1 st 4½ yrs ¹¹	Grab
Form 2A ⁹ Expanded Effluent Testing	--	--	--	--	Effluent	3 in the 1 st 4½ yrs ^{12,13}	Grab

Notes:

- 1 Percent removal = (average monthly influent load – average monthly effluent load) / average monthly influent load.
- 2 Loading (in lbs/day) = concentration (in mg/l) * concurrent flow (in mgd) * 8.34.
- 3 The monthly value is calculated as a geometric mean, i.e. the *n*th root of the product of the individual data points.
- 4 Reporting is required within 24 hours of a maximum daily limit violation. See §§ I.B.1 and III.G.
- 5 The dissolved oxygen limit is a minimum daily limit.
- 6 Concentrations of TAqH must be determined and summed using a combination of: (A) EPA Method 602 (plus xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH; and (B) EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed in EOA Method 610; use of an alternative method requires EPA approval; the EPA methods referred to in this note may be found in 40 CFR §136, Appendix A, as revised as of July 1, 2002, and adopted by reference.
- 7 See additional requirements for sampling of this pollutant in §II.A.5 -- Pretreatment Program Sampling.
- 8 The POTW must sample its influent, the crossover point to cell 2, and the effluent for sulfolane. In addition, whenever Flint Hills Refinery reports discharges of sulfolane in excess of 100 mg/l, the permittee must also conduct sulfolane sampling at these three locations at the POTW.
- 9 See NPDES permit application Form 2A at <http://www.epa.gov/npdes/pubs/final2a.pdf>

Table 1							
Effluent Limitations and Monitoring Requirements							
Parameter	Effluent Limitations				Monitoring Requirements		
	Average Monthly Limit	Average Weekly Limit	Average Monthly Minimum Removal	Maximum Daily Limit	Sample Location	Sample Frequency	Sample Type
10	In accordance with instructions in Form 2A, Part E; each WET test must be conducted in a different calendar year and different season, including one each in winter (Dec-Feb), spring (Mar-May), summer (Jun—Aug), and fall (Sept-Nov)						
11	In accordance with instructions in Form 2A, Part B.6; each test must be conducted in a different calendar year and different season, including one each in winter (Dec-Feb), summer (Jun—Aug), and spring or fall (Mar-May or Sept-Nov).						
12	In accordance with instructions in Form 2A, Part D; each test is conducted in a different calendar year and different season, including one each in winter (Dec-Feb), summer (Jun—Aug), and spring or fall (Mar-May or Sept-Nov).						
13	Expanded effluent testing must be conducted on the same day as WET testing; see §I.C, below.						

1. The permittee must report to EPA within 24 hours any violation of the maximum daily limits for chlorine, total aromatic hydrocarbons, or total aqueous hydrocarbons. The permittee must report violations of all other effluent limits at the time that discharge monitoring reports are submitted (See §§III.B. and III.H).
2. The permittee must not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.
3. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
4. The permittee must perform the effluent testing and the expanded effluent testing required by Parts B.6 and D of NPDES application Form 2A (EPA Form 3510-2A, revised 1/99). The permittee must submit the results of this testing with the next Discharge Monitoring Report (DMR) after receiving sampling results. To the extent that effluent monitoring required by other conditions of this permit satisfies this requirement, those samples may be used to satisfy the requirements of this paragraph.
5. Method Detection Limits. For all effluent monitoring for compliance with limits, the permittee must use EPA approved methods, unless there are none for that particular parameter, that can achieve a method detection limit less than the effluent limitation. For other parameters, the method detection limits listed in Table 2 below are required unless results consistently exceed a higher MDL for another approved method, in which case, that method may be used.

Table 2	
Method Detection Limits	
Parameter	MDL (mg/l)
Flow	---
BOD ₅	---
TSS	---
pH	---
Fecal coliform Bacteria	---
Total Residual Chlorine	0.1
Total Ammonia as N	0.01
Dissolved Oxygen	--
Arsenic	0.001
Cadmium	0.0001
Chromium	0.001
Copper	0.001
Cyanide	0.005
Lead	0.001
Mercury	0.0002
Molybdenum	0.003
Nickel	0.001
Selenium	0.002
Silver	0.0002
Zinc	0.0005
Hardness	10
Sulfolane	1.0

C. Whole Effluent Toxicity (WET) Testing Requirements

Toxicity tests must be performed at least four times in the first four and one half years of the permit term, each in a different calendar year and different season, including one each in winter (Dec-Feb), spring (Mar- May), summer (Jun—Aug), and fall (Sept-Nov). The results from the test must be reported to EPA and ADEC with the next DMR after receiving test results. Samples must be taken at the effluent sampling location. Testing must be conducted in accordance with subsections 1 through 5, below.

1. 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 §I.B. above. When the timing of sample collection coincides with that of the sampling required in §I.B, analysis of the split sample will fulfill the requirements of §I.B. as well.
2. Chronic Test Species and Methods
 - a. The permittee must conduct short-term chronic tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and the fathead minnow, *Pimephales promelas* (larval survival and growth test).
 - b. The presence of chronic toxicity must be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002.
 - c. Results must be reported in TU_c (chronic toxic units), where $TU_c = 100/\text{No Observed Effect Concentration (NOEC)}$; the IC_{25} must also be reported.
3. Toxicity Reduction Evaluation (TRE).
 - a. TRE Workplan Development. The permittee must submit to EPA a copy of the permittee's TRE workplan [1-2 pages] within 180 days of the effective date of this permit or at least two weeks before the first WET test is conducted, whichever is sooner. The permittee may use *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, EPA/833-B-99-002, August 1999, in developing a TRE workplan. This plan must describe the steps the permittee intends to follow in the event that whole effluent toxicity testing shows statistically significant toxicity at the dilution that corresponds to that anticipated at the edge of the mixing zone (91:1) and should include at a minimum:
 - (1) A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;
 - (2) A description of the facility's strategy for maximizing in-house treatment efficiency and employing good housekeeping practices;
 - (3) A list of all chemicals used in the operation of the facility; and

- (4) A discussion about who will conduct a toxicity identification evaluation (TIE) (i.e., in-house or other) if one is necessary.

b. TRE Workplan Implementation.

- (1) The TRE workplan is implemented if whole effluent toxicity testing shows a NOEC exceeds 91 TU_c.
- (2) Accelerated testing required in §I.C.4 is considered part of the first step of implementing the TRE.

4. Accelerated Testing

- a. If whole effluent toxicity testing shows a NOEC above 91 TU_c, the permittee must conduct at least one additional test, commencing within two weeks of receipt of the sample results showing toxicity. This time period may be extended on a case-by-case basis if the permittee has made a good faith effort to comply with the two week requirement and has been precluded from doing so for reasons beyond its control, such as adverse weather conditions affecting its ability to transport samples to the lab in a timely manner or unavailability of a lab to conduct the tests in the time frame required. A request to the Region 10 WET Coordinator will be needed to obtain such an extension.
- b. If the result of the additional test does not exceed 91 TU_c and if implementation of the TRE workplan indicates the probable source of toxicity (for instance, a temporary plant upset), no further additional testing is required. However, if this test result does exceed 91 TU_c or the TRE workplan does not reveal the probable source of toxicity, five additional tests are required every two weeks over the following ten-week period. This time period may be modified on a case-by-case basis if the permittee has made a good faith effort to comply with the permit requirement and has been precluded from doing so for reasons beyond its control, such as adverse weather conditions or unavailability of a lab to conduct the tests in the time frame required. A request to the Region 10 WET Coordinator will be needed to obtain such a modification.
- c. If chronic toxicity, as defined paragraph § I.C.3.a, is detected in any of the six additional tests, the permittee must initiate a TRE using *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999). This must include a description of 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. If none of the six tests required under paragraph § I.C.4.a and b, above, indicates toxicity, the permittee may return to the normal testing frequency.

5. Quality Assurance

- a. The toxicity testing on each organism must include a series of five test dilutions and a control. The dilution series shall include 8.8, 4.4, 2.2, 1.1, and 0.55 % effluent.
- b. All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002, and individual test protocols.
- c. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:
 - (1) 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.
 - (2) 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.
 - (3) Control and dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of EPA and ADEC. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

6. Reporting

- a. The permittee must submit the results of the toxicity tests with the next discharge monitoring report (DMR) after receiving the test results.
- b. The report of toxicity test results must include all relevant information outlined in Section 10, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002. 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 §I.B.

D. Surface Water Monitoring

The permittee must conduct surface water monitoring at the outside edge of the mixing zone. Surface water monitoring must start within six months after the effective date of the permit and continue for the duration of the permit. The program must meet the following requirements:

1. Location & Timing

- a. The downstream monitoring station must be established in the Tanana River at the edge of the mixing zone (or as close to it as is practical, given site and access limitations) described below.
- (1) The chronic mixing zone for this discharge during summer conditions (June 1 through September 30) is defined as the area extending downstream from the end of the outfall line with a length of 9 meters and a maximum width of 2 meters.
 - (2) The chronic mixing zone for this discharge during winter conditions (October 1 through May 31) is defined as the area extending downstream from the end of the outfall line with a length of 267 meters and a maximum width of 4 meters
 - (3) The permittee must seek approval of ADEC for the location of the surface water monitoring station. A failure to obtain ADEC approval of the location of the surface water monitoring station does not relieve the permittee of this surface water monitoring requirement.
 - (4) To the extent practicable, surface water samples must be collected on the same day as effluent samples.

2. Type of Sample: All surface water samples must be grab samples.

3. Sample Analysis: Samples must be analyzed for the parameters listed in Table 3 and must achieve acceptable method detection limits (MDLs) as listed in Table 2, above.

Table 3		
Surface Water		
Monitoring Requirements		
Parameter	Units	Sampling Frequency
Fecal Coliform	#/100 ml	2/year ¹
Total Residual Chlorine	mg/l	2/year ¹
pH	S.U.	2/year ¹
Dissolved Oxygen	mg/l	2/year ¹

¹ Once in the summer (June – September) at the edge of the summer mixing zone described in §I.D.1.a(1), above, and once in the winter (October – May) at the edge of the winter mixing zone described in §I.D.1.a.(2), above.

4. QA/QC: Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under §II.C, “Quality Assurance Plan”.

5. Reporting Results: Surface water monitoring results must be submitted to EPA and ADEC with the next DMR submittal after receiving test results. At a minimum, the report must include the following:
 - a. Dates of sample collection and analyses;
 - b. Results of sample analysis;
 - c. Relevant quality assurance/quality control (QA/QC) information.

II. Special Conditions

A. Pretreatment Program

1. Program Development

The permittee must develop and implement an Industrial Pretreatment Program that enables the permittee to detect and enforce against violations of federal, state, and local standards for the protection of the wastewater treatment works, its operation, worker health and safety, and the aquatic environment. This program is required under the authority of Section 307 (b) and (c) and Section 402 (b)(8) of the Clean Water Act, and federal regulations at 40 CFR §403, the General Pretreatment Regulations for existing and New Sources of Pollution. The permittee must develop the pretreatment program as follows:

- a. Within six months of the effective date of this permit, submit for approval the results of a user survey, which identifies all Nondomestic Users of the waste collection system. This submittal must designate those Nondomestic Users, which meet the definition of Significant Industrial Users and Categorical Industrial Users, as defined in 40 CFR §403.3. For Nondomestic Users the following information must be included:
 - (1) User's names and mailing address including both the local facility address and the main office address, if different;
 - (2) The principal enterprise(s) of the user; the product(s) produced and raw material(s) processed; the facility's production rate(s); and the Standard Industrial Classification (SIC) Code(s), and the applicable categorical standard;
 - (3) The quantity of process wastewater discharged daily and whether the discharge is intermittent or continuous;
 - (4) A description of any pretreatment provided prior to discharge to the waste collection system;
 - (5) A description of the wastewater characteristics in terms of pollutant parameters and concentrations; and
 - (6) A list of all chemicals used, stored, or generated at the facility including those used for processing, cooling water, boiler water, or other purposes, with an indication of the quantity used and the disposition of spent chemicals.

2. Submittal of Documents.

a. Approval Authority.

The permittee must submit all documents required for the Industrial Pretreatment Program to the Approval Authority. The Approval Authority is EPA until and unless the State of Alaska becomes the Approval Authority, following EPA delegation of the NPDES program, including pretreatment, to the State. While EPA is the Approval Authority, the permittee must submit pretreatment reports to EPA at the following address:

Pretreatment Coordinator
U.S. EPA Region 10, OWW-130
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

b. Within twelve months of the effective date of this permit, the permittee must submit for Approval Authority review draft versions of a sewer use ordinance, statutes, contracts, interjurisdictional agreements, and/or joint powers agreements necessary to provide the permittee with adequate legal authorities described in 40 CFR §403.8(f)(1)(i through vii) throughout the area served by the permittee's facility. The legal authority must enable the permittee to:

- (1) Deny or condition new or increased contributions of pollutants or changes in the nature of pollutants to the waste collection system by Nondomestic Users;
- (2) Require compliance with applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by the permittee, as Control Authority, including the specific prohibitions of 40 CFR 403.5 (National Pretreatment Standards: Prohibited Dischargers);
- (3) Control through permit, order, or equivalent individual control mechanism, the contribution to the waste collection system by all Significant Industrial Users;
- (4) Require compliance schedules for the installation of treatment facilities needed by Nondomestic Users to meet applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by the permittee;
- (5) Require the submission of notices and self-monitoring reports from Nondomestic Users to assess and ensure compliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by the permittee;
- (6) Carry out all inspections, surveillance, and monitoring procedures to determine, independent of information supplied by Nondomestic Users, compliance or noncompliance with applicable National Pretreatment Standards and other more restrictive requirements as may be imposed by the permittee;
- (7) Seek injunctive relief and assess civil or criminal penalties of at least \$1,000 a day for each violation, for noncompliance with National Pretreatment Standards and other more restrictive requirements as may be imposed by the permittee; and

- (8) Require Nondomestic Users to implement best management practices, including installing containment facilities, to protect the treatment works from accidental spills of any polluting materials.
- c. Within eighteen months after the effective date of this permit, the permittee must submit for Approval Authority review:
 - (1) A detailed description of the permits which will be used by the permittee to apply applicable Pretreatment Standards and requirements to the Nondomestic Users;
 - (2) A detailed description of the inspection, monitoring, and other program procedures, as required by 40 CFR §403.8(f)(2)(i through vii);
 - (3) An Enforcement Response Plan, as required by 40 CFR §403.8(f)(5), which includes detailed procedures indicating how the permittee will investigate and respond to instances of Nondomestic User noncompliance;
 - (4) A description of the resources, equipment, and personnel necessary to implement the Industrial Pretreatment Program, including an indication of how the program will be fully funded; and
 - (5) A written technical evaluation and development of local limits, in accordance with 40 CFR §403.5(c).
 - d. Within twenty-one months after the effective date of this permit, the permittee must submit to the Approval Authority for approval and request to implement, the complete approvable Industrial Pretreatment Program. A request for program approval must include the following:
 - (1) Applicable statutes, ordinances, permits, and agreements which have been enacted or adopted by the permittee;
 - (2) A detailed description of the permits which will be used by the permittee to apply applicable Pretreatment Standards and requirements to the Nondomestic Users;
 - (3) A detailed description of the inspection, monitoring, and other program procedures, as required by 40 CFR §403.8(f)(2)(i through vii);
 - (4) An Enforcement Response Plan, as required by 40 CFR §403.8(f)(5), which includes detailed procedures indicating how the permittee will investigate and respond to instances of Nondomestic User noncompliance;
 - (5) A description of the resources, equipment, and personnel necessary to implement the Industrial Pretreatment Program, including an indication of how the program will be fully funded; and
 - (6) A written technical evaluation and development of local limits, in accordance with 40 CFR §403.5(c).
 - e. Within one month after approval by the Approval Authority, the permittee must implement and enforce the Industrial Pretreatment Program
3. Spill Prevention and Slug Discharges
The permittee must implement an accidental spill prevention program to reduce and prevent spills and slug discharges of pollutants from non-domestic users.

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- a. Control mechanisms for Significant Industrial Users (SIUs) must contain requirements to control slug discharges if determined by the POTW to be necessary [40 CFR §403.8(f)(1)(iii)(B)(6)].
- b. SIUs must be evaluated for the need for a plan or other action to control slug discharges within 1 year of being designated an SIU [40 CFR §403.8(f)(2)(vi)].
- c. SIUs must notify the POTW immediately of any changes at their facilities affecting the potential for a slug discharge [40 CFR §403.8(f)(2)(vi)].

4. Enforcement Requirement

Whenever, on the basis of information provided to EPA, it is determined that any source contributes pollutants to the permittee's facility in violation of subsection (b), (c), or (d) of Section 307 of the Act, EPA will notify the permittee. Failure by the permittee to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action by the EPA against the source and permittee.

5. Sampling Requirements

- a. Parameters: The permittee must sample influent and effluent from the POTW for arsenic, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, zinc, and sulfolane. Metals must be analyzed and reported as total metals.
- b. Frequency: The permittee must sample for arsenic, chromium, copper, nickel, and selenium once per quarter. Sampling for cadmium, cyanide, lead, mercury, molybdenum, silver, zinc, and sulfolane must be conducted twice per year: once between January 1 and June 30 and once between July 1 and December 31. The two sampling events must be approximately 6 months apart.
- c. Sampling Locations and Sample Type: The permittee must sample as described in Table 4. To the extent that the timing of this sampling coincides with that required in §I.B, above, these results will satisfy the requirements of that section.

Table 4		
Pretreatment POTW Monitoring		
Location	Sample Type	Frequency
Influent	24-hour Composite ¹	3 days within a week (Mon - Fri)
Effluent	grab ¹	3 days within a week (Mon - Fri)
<p>1 Influent and effluent samples for cyanide must be collected and analyzed as required in § II.A.5.f , below.</p>		

- d. Analytical Methods: For influent and effluent pretreatment sampling, the permittee must use EPA-approved analytical methods, unless there are none for that particular parameter, that achieve the method detection limits (MDLs) in Table 2, above, unless higher detection limits are approved by EPA. Requests for higher MDLs for pretreatment monitoring must be submitted in writing to the Pretreatment Coordinator at the address in §II.A.8, below.
- (1) Sulfolane Analytical Method: Within 60 days of the effective date of this permit, the permittee must submit to the EPA pretreatment coordinator at the address in §II.B.6.a, below, a detailed description of the test procedure for sulfolane, which the City is using, with references to published studies of the applicability of the procedure to the pollutant in question.
- e. Reporting Results: Analytical results for each day's samples must be reported separately. In addition to the reporting with the DMRs required in §III.B, below, sample results must be submitted with the pretreatment annual report required in §II.A.6.a, below.
- f. Cyanide sampling: Influent sampling for cyanide must be conducted as follows. Eight discrete grab samples must be collected over a 24-hour day. Each grab sample of influent or effluent must be at least 100 ml. Each sample must be checked for the presence of chlorine and/or sulfides prior to preserving and compositing (influent only) (refer to Standard Methods, 4500-CN B). If chlorine and/or sulfides are detected, the sample must be treated to remove any trace of these parameters. After testing and treating for the interference compounds, the pH of each sample must be adjusted, using sodium hydroxide, to 12.0 standard units. Each sample of the influent can then be composited into a larger container, which chilled to 4 degrees Celsius, to allow for one analysis for the day. The effluent grab sample must also be chilled to 4 degrees Celsius.
6. Pretreatment Report
- a. The permittee must submit an annual report pursuant to 40 CFR §403.12(i) that describes the permittee's program activities over the January to December report year. This report must be submitted to the following address no later than January 31 of each year, until and unless the State of Alaska becomes the Approval Authority:
- Pretreatment Coordinator
U.S. Environmental Protection Agency
Region 10, OWW-130
1200 Sixth Avenue, Suite 900
Seattle, WA 98101
- b. The pretreatment report should be compiled following the Region 10 Annual Report Guidance. Until the City's pretreatment program is approved by the Approval Authority, the Annual Report must include the information listed in §§ (1) – (3), below. Once the pretreatment program is approved by the Approval Authority, the report must include the information listed in §§(1) – (6), below.

- (1) An updated non-domestic user inventory, including those facilities that are no longer discharging (with explanation), and new dischargers, appropriately categorized and characterized. Categorical users should have the applicable category noted as well as cases where more stringent local limits apply instead of the categorical standard.
- (2) Results of wastewater sampling at the POTW as specified in §II.H (above).
- (3) Calculations of removal rates for each pollutant for each day of sampling.
- (4) An analysis and discussion of whether the existing local limitations in the permittee's sewer use ordinance continue to be appropriate to prevent treatment plant interference and pass through of pollutants that could affect water quality or sludge quality. This should include a comparison between influent loadings and the most recent relevant maximum allowable headworks loadings calculated for the treatment plant.
- (5) Status of program implementation, including:
 - (a) *Any planned modifications to the pretreatment program that have been approved by EPA, including staffing and funding updates.*
 - (b) *A description of any interference, upset, or NPDES permit violations experienced at the POTW which were directly or indirectly attributable to non-domestic users, including:*
 - (i) Date & time of the incident
 - (ii) Description of the effect on the POTW's operation
 - (iii) Effects on the POTW's effluent and biosolids quality
 - (iv) Identification of suspected or known sources of the discharge causing the upset
 - (v) Steps taken to remedy the situation and to prevent recurrence
 - (c) *Listing of non-domestic users inspected and/or monitored during the report year with dates and an indication compliance status.*
 - (d) *Listing of non-domestic users planned for inspection and/or monitoring for the coming year along with associated frequencies.*
 - (e) *Listing of non-domestic users whose permits have been issued, reissued, or modified during the report year along with current permit expiration dates.*
 - (f) *Listing of non-domestic users notified of promulgated pretreatment standards and/or local standards during the report year as required in 40 CFR 403.8(f)(2)(iii).*
 - (g) *Listing of non-domestic users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing must include the final date of compliance for each facility.*

- (6) Status of enforcement activities including:
- (a) *Listing of non-domestic users who failed to comply with applicable pretreatment standards and requirements, including:*
 - (i) Summary of the violation(s);
 - (ii) Enforcement action taken or planned by the permittee;
 - (iii) Present compliance status as of the date of preparation of the pretreatment report.
 - (b) *Listing of those users in significant noncompliance during the report year as defined in 40 CFR 403.8(f)(2)(viii) and a copy of the newspaper publication of those users' names.*

B. Operations and Maintenance Plan

In addition to the requirements specified in Section III.E of this permit (Proper Operation and Maintenance), the permittee must develop and implement a Operations and Maintenance Plan (O&M) within 180 days of the effective date of the this permit. Also, within 180 days after the effective date of this permit, the permittee must provide written notice to EPA and ADEC that an O&M plan for the wastewater treatment facility has been developed and implemented. The plan must be retained on site and made available to EPA and ADEC on request.

C. Quality Assurance Plan (QAP)

The permittee must develop and implement a quality assurance plan (QAP) for all monitoring required by this permit within 90 days of the effective date of this permit. The permittee must submit written notice to EPA and ADEC that the QAP has been developed and implemented within 90 days of the effective date of this permit. Any existing QAPs may be modified for compliance with this section.

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.
2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance Project Plans (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
3. At a minimum, the QAP must include the following:
 - a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample

preparation requirements, sample shipping methods, and laboratory data delivery requirements.

- b) Map(s) indicating the location of each sampling point.
 - c) Qualification and training of personnel.
 - d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
 5. Copies of the QAP must be kept on site and made available to EPA and/or ADEC upon request.

D. 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 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.

E. Posting of Sign on Shoreline

Within 90 days of the effective date of this permit, the permittee must place at least one sign on the shoreline of the Tanana River near the facility's outfall and near the mixing zone stating:

1. that treated domestic wastewater is being discharged,
2. the approximate location, timing, and size of the mixing zones, delineated in §I.D.1.a (1) and (2), above, and
3. the name of the facility, its owner, and a contact telephone number.

III. Monitoring, Recording and Reporting Requirements

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

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in §I.B of this permit that are likely to be affected by the discharge. This particularly applies to discharges of more than 100 mg/l sulfolane from the Flint Hills Refinery.

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 §III.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with §III.D ("Additional Monitoring by Permittee").

B. Reporting of Monitoring Results

The permittee must summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1) or equivalent. The permittee must submit reports monthly, postmarked by the 15th day of the following month. The permittee must sign and certify all DMRs and all other reports, in accordance with the requirements of §V.E. of this permit ("Signatory Requirements"). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, EPA Region 10, with copies to the ADEC at the following addresses:

US EPA Region 10, OCE-133
Attn: ICIS Data Entry Team
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

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Alaska Department of Environmental Conservation
Division of Water
610 University Ave.
Fairbanks, AK 99709

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR §136, unless 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 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:

- a. The date, exact place, and time of sampling or measurements;
- b. The name(s) of the individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The names of the individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

F. Retention of Records

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

G. Twenty-four Hour Notice of Noncompliance Reporting

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 §IV.F, “Bypass of Treatment Facilities”);
 - c. Any upset that exceeds any effluent limitation in the permit (See §IV.G, “Upset Conditions”); or
 - d. Any violation of a maximum daily discharge limitation for total residual chlorine as identified in §I.B.1, above.
 - e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.
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 §III.G.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 prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.
3. The Director of the Office of Compliance and Enforcement 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. Written reports must be submitted to the addresses in §III.B (“Reporting of Monitoring Results”).

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance that are not required to be reported within 24 hours, at the time that discharge monitoring reports are submitted (§III.B “Reporting of Monitoring Results”). The reports must contain the information listed in §III.G.2, above (“Twenty-four Hour Notice of Noncompliance Reporting”).

I. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and ADEC in writing of:

1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
3. For the purposes of this section, adequate notice must include information on:
 - a. The quality and quantity of effluent to be introduced into the POTW, and
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
4. The permittee must notify the Director of the Office of Water and Watersheds at the following address:

US EPA Region 10, OWW-130
Attn: NPDES Permits Unit Manager
1200 6th Avenue, Suite 900
Seattle, WA 98101

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 Act 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 Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$32,500 per day for each violation).
2. **Administrative Penalties.** Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of

this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$32,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$157,500).

3. Criminal Penalties:

- a. Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, 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 section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, 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 section 309(c)(3)(B)(iii) of the Act, 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 Act 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 includes 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, below.
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.

- b. Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under §III.G (“Twenty-four Hour Notice of Noncompliance Reporting”).
3. Prohibition of bypass
 - a. Bypass is prohibited, and the Director of the Office of Compliance and Enforcement may take enforcement action against the permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) 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
 - (3) The permittee submitted notices as required under paragraph 2 of this Part.
 - b. The Director of the Office of Compliance and Enforcement may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in §IV.F.3.a.

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 §IV.G.2, below. 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 §III.G, “Twenty-four Hour Notice of Noncompliance Reporting;” and
 - d. The permittee complied with any remedial measures required under §IV.D, “Duty to Mitigate.”
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act 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 as soon as possible to the Director of the Office of Water and Watersheds, as specified in § III.I.4, above, and ADEC 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 Office of Compliance and Enforcement and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

K. Reopener

This permit may be reopened to include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Act. 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, 122.64, 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.

C. Duty to Provide Information

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

D. Other Information

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

E. Signatory Requirements

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

1. All permit applications must be signed as follows:
 - a. For a corporation: by a responsible corporate officer.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c. For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by EPA or ADEC must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or

position having overall responsibility for environmental matters for the company; and

- c. The written authorization is submitted to the Director of the Office of Compliance and Enforcement and ADEC.
3. Changes to authorization. If an authorization under §V.E.2, above, 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 §V.E.2, above must be submitted to the Director of the Office of Compliance and Enforcement 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.”

F. Availability of Reports

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

G. Inspection and Entry

The permittee must allow the Director of the Office of Compliance and Enforcement, 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;

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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.

H. 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.

I. Transfers

This permit is not transferable to any person except after written notice to the Director of the Office of Water and Watersheds as specified in §III.I.4, above. 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).

J. State Laws

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

VI. Definitions

“Act” means the Clean Water Act.

“ADEC” means Alaska Department of Environmental Conservation.

“Administrator” means the Administrator of the EPA, or an authorized representative.

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

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

“Best Management Practices” (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

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

“CFR” means *Code of Federal Regulations*.

“Chronic toxic unit” (“TUc”) is a measure of chronic toxicity. TUc is the reciprocal of the highest effluent concentration (as percent dilution of full-strength effluent) that causes no observable effect on the test organisms by the end of the chronic exposure period, multiplied by 100 (i.e., 100/“NOEC”).

“Composite” - see “24-hour composite”.

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

“Director of the Office of Compliance and Enforcement” means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.

“Director of the Office of Water and Watersheds” means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.

“DMR” means Discharge Monitoring Report.

“EPA” means the United States Environmental Protection Agency.

“*Fed. Reg.*” means the *Federal Register*.

“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.

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

“IC₂₅” means the concentration at which inhibition is shown in 25 percent of the test organisms.

“Interference” is defined as inhibiting or disrupting the POTW, the treatment plant or its operations, or is a cause of a violation of the city’s NPDES permit.

“MGD” means million gallons per day.

“mg/l” means milligrams per liter.

“ml” means milliliter.

“Maximum daily limit” means the highest allowable “daily discharge.”

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

“NOEC” means no observed effect concentration. The NOEC is the highest concentration (least dilution) 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).

“NPDES” means National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits . . . under Sections 307, 402, 318, and 405 of the CWA.

“pH” means a measure of the hydrogen ion concentration of water or wastewater, expressed as the negative logarithm of the hydrogen ion concentration, in mg/l. A pH of 7 is neutral; a pH less than 7 is acidic; a pH greater than 7 is basic.

“Pass Through” means a 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).

“POTW” means publicly owned treatment works.

“QA/QC” means quality assurance/quality control.

“QAP” means Quality Assurance Plan.

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

“SIU” means Significant Industrial User.

“S.U.” means standard unit, a measure of pH.

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“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

“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 the most recent edition of Standard Methods for the Examination of Water and Wastewater.

“U.S.C.” means *United States Code*.

“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.

“WET” means whole effluent toxicity.