United States Environmental Protection Agency (EPA) Region 10 1200 Sixth Avenue Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

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",

United States Coast Guard Integrated Support Command Kodiak P.O. Box 195025 Kodiak, Alaska 99619-5025

is authorized to discharge from its wastewater treatment facility, located near Kodiak, Alaska, at the following location:

<u>Outfall</u>	Receiving Water	<u>Latitude</u>	Longitude
001	St. Paul Harbor	57° 44' 29" N	152° 28' 43" W

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

This permit shall become effective **June 1, 2005**.

This permit and the authorization to discharge shall expire at midnight, May 31, 2010.

The permittee shall apply for a permit reissuance on or before **December 2, 2009**, 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 27th day of April, 2005,

/s/ Robert R. Robichaud for
Michael F. Gearheard

Director

Office of Water and Watersheds, Region 10 U.S. Environmental Protection Agency

Permit No.: AK-002064-8 Page 2 of 31

TABLE OF CONTENTS

Cove	r SheetIssuar	nce and Expiration Dates	1
SUBI	MITTAL & TA	ASK DEADLINES	4
I.	I IMITATIC	ONS AND MONITORING REQUIREMENTS	5
1.	A.	Effluent Limitations and Monitoring	
	В.	Whole Effluent Toxicity	_
	Б. С.	Expanded Effluent Testing	
	D.	Effluent Testing for Endocrine Disrupting Chemicals (EDCs)	
	Б. Е.	Landfill Leachate Monitoring	
	F.	Surface Water Monitoring.	
	G.	Quality Assurance Plan (QAP)	
	Н.	Facility Planning Requirement.	
	11.	Tuenty Truming Requirement.	<u>17</u>
II.	MONITORI	ING, RECORDING AND REPORTING REQUIREMENTS	
	A.	Representative Sampling (Routine and Non-Routine Discharges)	
	В.	Reporting of Monitoring Results	
	C.	Monitoring Procedures	
	D.	Additional Monitoring by Permittee	
	E.	Records Contents	
	F.	Retention of Records	
	G.	Twenty-four Hour Notice of Noncompliance Reporting	
	H.	Other Noncompliance Reporting	<u>20</u>
	I.	Notice of New Introduction of Pollutants	
	J.	Compliance Schedules	<u>21</u>
III.	COMPLIAN	NCE RESPONSIBILITIES	21
	A.	Duty to Comply	
	B.	Penalties for Violations of Permit Conditions	
	C.	Need to Halt or Reduce Activity not a Defense	
	D.	Duty to Mitigate	
	E.	Proper Operation and Maintenance	23
	F.	Bypass of Treatment Facilities	
	G.	Upset Conditions	
	H.	Toxic Pollutants	<u>25</u>
	I.	Planned Changes	<u>25</u>
	J.	Anticipated Noncompliance	<u>25</u>
	K.	Warning Sign Installation	<u>25</u>
IV.	GENERAL	PROVISIONS	26
.	A.	Permit Actions	
	В.	Duty to Reapply	
	C.	Duty to Provide Information	
	D.	Other Information	
	E.	Signatory Requirements	
	L.	~-0	· · · · <u>~ · · </u>

Permit No.: AK-002064-8 Page 3 of 31 F. G. H. I. J. K. V. LIST OF TABLES

Permit No.: AK-002064-8 Page 4 of 31

SUBMITTAL & TASK DEADLINES

The following is a summary of some of the items the permittee must complete and/or submit to EPA and the Alaska Department of Environmental Conservation (ADEC) during the term of this permit:

Item	Task Deadline	Receiving Party
Discharge Monitoring Reports	Monthly, postmarked no later than the 10 th day of the following month	EPA with copies to ADEC
Whole Effluent Toxicity (WET) results	*Once in each of the first 4 years of the permit, each in a different quarter. *Reports postmarked by 10 th day of the following month	EPA with copies to ADEC
Accelerated WET testing	Begin within 2 weeks after receiving results showing toxicity;	
Toxicity Identification Evaluation	Begin within 15 days of receipt of the additional sample results showing toxicity	
Expanded Effluent Testing	3 times in first 4½ years of the permit, including once in the first year. Submit with permit application by December 2, 2009.	EPA
Landfill Leachate Monitoring	Once in each six month period, beginning with the effective date of the permit. Submit with permit application by December 2, 2009.	EPA
Surface Water Monitoring results	Stations 1 and 2: sample quarterly ; Submit all results by January 31 of the following year.	EPA & ADEC
Toxicity Reduction Evaluation workplan	August 30, 2005	EPA
Quality Assurance Plan	 Develop by August 30, 2005 Submit notification of implementation September 29, 2005. 	EPA & ADEC
Noncompliance report	Verbal report within 24 hours Written report within 5 days	EPA
Warning Sign Installation	August 30, 2005	
Application for permit renewal	December 2, 2009	EPA, with copies to ADEC

Permit No.: AK-002064-8 Page 5 of 31

I. LIMITATIONS AND MONITORING REQUIREMENTS

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfall specified herein to St. Paul Harbor 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.

A. Effluent Limitations and Monitoring

1. The permittee must limit and monitor discharges from outfall 001 as specified in Table 1 below. All limitations represent maximum effluent limits, unless otherwise indicated. The permittee must comply with the effluent limitations in Table 1 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 for Outfall 001						
_	Effluent Limitations			Monitoring Requirements		
Parameter	Maximum Daily	Average Weekly	Average Monthly	Sample Location	Sample Frequency	Sample Type
Outfall Flow, MGD	1.5	_	_	Effluent	continuous	recording
Biochemical oxygen demand (BOD ₅)	60 mg/l	45 mg/l	30 mg/l & ≥ 85% removal	Influent &	1/week	24 hour composite
	_	564 lbs/day ¹	376 lbs/day ¹	Effluent		
Total Suspended Solids (TSS)	60 mg/l	45 mg/l	30 mg/l & ≥ 85% removal	Influent &	1/week	24 hour composite
	_	564 lbs/day ¹	376 lbs/day¹	Effluent		
Fecal coliform bacteria	800/100 ml	400/100 ml	200/100 ml	Effluent	1/week	grab
Total Residual Chlorine ²	0.33mg/l ³	0.28 mg/l ³	0.12 mg/l^3	Effluent	daily	grab
pН v		vithin the range of 6.0 and 9.0		Effluent	daily	grab
Dissolved oxygen	2.0 mg/l minimum	_	-	Effluent	weekly	grab
Total Aqueous Hydrocarbons	15 μg/l			Effluent	monthly	grab
Total Aromatic Hydrocarbons	10 μg/l			Effluent	monthly	grab
Temperature, °C				Effluent	daily	grab
Total Ammonia, mg/l	_		_	Effluent	quarterly	24 hr composite
Copper ⁴	_		_	Effluent	quarterly	24 hr composite

Page 6 of 31

	Table 1:	
Ef	fluent Limitations and Monitoring Requ	nirements for Outfall 001
	Effluent Limitations	Monitoring Doguiroments

n .		Effluent Limitations		Monitoring Requirements		
Parameter	Maximum Daily	Average Weekly	Average Monthly	Sample Location	Sample Frequency	Sample Type
Nickel ⁴	_	-	_	Effluent	quarterly	24 hr composite
Zinc ⁴	_	-	_	Effluent	quarterly	24 hr composite

- 1. Mass loading (lbs/day) = Concentration (mg/l) x flow (MGD) x 8.34 lbs-l/gallon-mg.
- 2. If the permittee uses chlorination as its disinfection method, it must monitor chlorine.
- 3. Reporting is required within 24 hours of a maximum daily limit violation. See Part II.G.4
- 4. All metals must be reported as total recoverable.
 - 2. The discharge may not cause nor contribute to concentrations of petroleum hydrocarbons, animal fats, or vegetable oils in shoreline or bottom sediments that cause deleterious effects to aquatic life.
 - 3. The discharge may not cause nor contribute to a film, sheen, floating oil, discoloration, sludge, solid, or emulsion on the surface of the water, in the water column, or on the bottom of the receiving water body or on adjoining shorelines.
 - 4. The discharge may not include, alone or in combination with other substances or wastes, floating solids, debris, sludge, deposits, foam, scum or other residues in quantities that make the water unfit or unsafe for any marine use.
 - 5. Percent removal of BOD₅ and TSS must be reported on the Discharge Monitoring Reports (DMRs). For each parameter, 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. Influent and effluent samples must be taken over approximately the same time period.
 - 6. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.
 - 7. Method Detection Limits. For all effluent monitoring, the permittee must use methods that can achieve a method detection limit (MDL) less than the effluent limitation, if possible. If the lowest MDL for all approved methods is above the limit, the permittee must report at the minimum level (ML) noted in Table 1. For parameters that do not have effluent limitations, the permittee must use methods that can achieve MDLs less than or equal to those specified in Table 5 (Part I.E.3.).
 - 8. For purposes of reporting on the DMR, if a value is equal to or greater

Permit No.: AK-002064-8 Page 7 of 31

than the MDL (or ML), the permittee must report the actual value. If a value is less than the MDL (or ML), the permittee must report "less than {numeric MDL (or ML)}" on the DMR. For purposes of calculating monthly averages, zero may be used for values less than the MDL (or

B. Whole Effluent Toxicity (WET)

ML).

1. Testing Requirements. The permittee must conduct chronic toxicity tests on final effluent samples from outfall 001 as specified below.

- a. Sampling requirements.
 - i) Toxicity testing must be conducted on 24-hour composite samples of effluent.
 - ii) A split of each sample collected must be analyzed for the chemical and physical parameters required in Part I.A above. When the timing of sample collection coincides with that of the sampling required in Part I.A, analysis of the split sample will fulfill the requirements of Part I.A.

b. Chronic Test Species and Methods

- i) For outfall 001, chronic tests must be conducted once in each of the first four years of the permit term, each one in a different calendar quarter. Samples should be timed to assess the impact of treated effluent from the LOWS facility and landfill leachate influent on the effluent water quality.
- ii) The permittee must conduct short-term chronic tests with a bivalve species (larval development test), either the Pacific oyster (*Crassostrea gigas*) or the mussel (*Mytilus galloprovincialis*) and with an echinoderm (fertilization test), either the purple sea urchin (*Strongylocentrotus purpuratus*) or the Sand dollar (*Dendraster excentricus*), depending on the availability of the echinoderm.
- iii) 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 West Coast Marine and Estuarine Organisms*, ("West Coast Methods") EPA/600/R-95/136, August 1995.
- iv) A series of five dilutions and a control must be tested. The series should include effluent dilutions of 100%, 75%,

Permit No.: AK-002064-8 Page 8 of 31

50%, 25%, and 12.5%.

v) A minimum of four replicates is required for each concentration.

c. Quality Assurance

- All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with EPA's West Coast Methods and individual test protocols.
- ii) In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:
 - (a) 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.
 - (b) If the test acceptability criteria in the West Coast Methods are not achieved, then the permittee must re-sample and re-test within 14 days of receipt of the test results. 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 14 day 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 at 206-553-6389 or derr.rebecca@epa.gov will be needed to obtain such an extension.
 - (c) Control and dilution water must be receiving water or lab water, as appropriate, as described in the West Coast Methods. 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 the Alaska Department of Environmental Conservation

Permit No.: AK-002064-8 Page 9 of 31

(ADEC). In no case shall water that has not met test acceptability criteria be used for either dilution or control.

d. Reporting

- i) Results must be reported in TU_c (chronic toxic units), where $TU_c = 100/NOEC$. The no observed effect concentration (NOEC) is the highest concentration of toxicant, expressed as a percentage of full strength, to which organisms are exposed in a chronic test, that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are <u>not</u> statistically significant different from the controls)¹.
- ii) Both the NOEC and the IC_{25} must be reported. The inhibition concentration, IC_{25} , is a point estimate of the toxicant concentration that causes a 25 percent reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (the EPA Interpolation Method).
- iii) The permittee must submit the results of the toxicity tests including any accelerated testing conducted during the month with the DMRs for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and that accelerated testing is unnecessary, then the results of the follow-up test must also be submitted with the DMR for the month in which the investigation occurred.
- iv) The report of toxicity test results must include all relevant information outlined in Section 10, Report Preparation, of EPA's West Coast Methods. 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 Part I.A.
- 2. Toxicity Reduction Evaluation (TRE).

1

If, in the calculation of a NOEC, two tested concentrations cause statistically adverse effects, but an intermediate concentration did not cause statistically significant effects, the test should be repeated or the lowest concentration must be used. For example: 6.25, 12.5, 25, 50 and 100% effluent concentrations are tested. The 12.5 and 50% concentrations are statistically significant, but 25% is not significant. If the test is not repeated, then the NOEC is 6.25%.

Permit No.: AK-002064-8 Page 10 of 31

a. TRE Workplan Development. The permittee must submit to EPA a copy of the permittee's TRE workplan [1-2 pages] within 90 days of the effective date of this permit. 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 (27:1) and should include at a minimum:

- A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;
- ii) A description of the facility's strategy for maximizing inhouse treatment efficiency and employing good housekeeping practices;
- iii) A list of all chemicals used in the operation of the facility; and
- iv) 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.
 - i) The TRE workplan is implemented if whole effluent toxicity testing shows a NOEC exceeds 1 TU_c.
 - ii) Accelerated testing required in §I.B.3 is considered part of the first step of implementing the TRE.

3. Accelerated Testing

a. If whole effluent toxicity testing shows a NOEC above 1 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 at 206-553-6389 or derr.rebecca@epa.gov will be needed to obtain such an extension.

Permit No.: AK-002064-8 Page 11 of 31

If the result of the additional test does not exceed 1 TU_c and if b. 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 1 TU_s or the TRE workplan does not reveal the probable source of toxicity, five additional tests are required bi-weekly (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 at 206-553-6389 or derr.rebecca@epa.gov will be needed to obtain such an modification.

- c. If any of the six additional test results exceed 1 TU_c, then, in accordance with the permittee's TRE workplan and with *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*², the permittee must initiate a toxicity identification evaluation (TIE) in accordance with EPA toxicity identification evaluation manuals³ within fifteen (15) days of receipt of the sample results showing toxicity.
- d. If a TIE is triggered prior to completion of the accelerated testing, the accelerated testing schedule may be terminated or used as necessary in implementing the TIE.
- e. If none of the six test results exceed 1 TUc, then the permittee may return to the normal testing frequency.
- **C. Expanded Effluent Testing.** Expanded effluent testing is required three times in the first four and one half years of the permit term, including once in the first year, to gather data required for evaluation of the effluent for the next permit renewal
 - 1. The permittee shall conduct chemical analyses of effluent samples

² Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants. EPA/833/B-99/002. EPA, Office of Water, August 1999.

³ Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I. EPA/600/6-91/005F (May 1992); Methods for Aquatic Toxicity Identification Evaluations: Phase II-Toxicity Identification Procedures for Samples exhibiting acute and chronic toxicity. EPA/600/R-92/080 (September 1993); and Methods for Aquatic Toxicity Identification Evaluations: Phase III–Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity. EPA-600/R-92/081 (September 1993)

Page 12 of 31

collected from the wastewater treatment system in accordance with protocols, monitoring requirement, and quality assurance/quality control (QA/QC) procedures specified in this section.

- 2. The sample shall be a representative composite sample, collected through continuous sampling or by six grab samples equally spaced over a 24 hour period.
- 3. Sampling reports must be retained and made available to EPA or ADEC inspectors upon request and must be submitted to EPA with the next permit application (at least 180 days before the expiration of this permit).
- 4. The sample shall be analyzed for the following constituents:

Conventional & Nonconventional Pollutants/Parameters

Oil & Grease Nitrate plus Nitrite Nitrogen

Dissolved Oxygen Total Phosphorus

Total Kjeldahl Nitrogen (TKN) Total Dissolved Solids

Metals

Antimony Nickel
Arsenic Selenium
Barium Silver
Beryllium Thallium
Cadmium Zinc
Chromium Cyanide

Copper Total Phenolic Compounds
Lead Hardness (as CaCO₃)

Mercury

Volatile Organic Compounds

acrolein 1,1-dichloroethyene
acrylonitrile 1,2-dichloropropane
benzene 1,3-dichloro-propylene

bromoform ethylbenzene
carbon tetrachloride methyl bromide
chlorobenzene methyl chloride
chlorodibromo-methane methylene chloride

chloroethane 1,1,2,2-tetrachloro-ethane 2-chloro-ethylvinyl ether tetrachloro-ethylene

chloroform toluene

Page 13 of 31

dichlorobromo-methane1,1,1-trichloroethane1,1-dichloroethane1,1,2-trichloroethane1,2-dichloroethanetrichloroethylenetrans-1,2-dichloro-ethylenevinyl chloride

Acid-extractable compounds

P-chloro-M-cresol 2-nitrophenol 2-chlorophenol 4-nitrophenol 2,4-dichlorophenol pentachlorophenol

2,4-dimethylphenol phenol

4,6-dinitro-o-cresol 2,4,6-trichlorophenol

2,4-dinitrophenol

Base-neutral compounds

acenaphtene 1,4-dichlorobenzene
acenaphthylene 3,3-dichlorobenzidine
anthracene diethyl phthalate
benzo(A)anthracene 2,4-dinitrotoluene
benzo(A)pyrene 2,6-dinitrotoluene
3,4-benzo-fluoranthene 1,2-diphenylhydrazine

benzo(GHI)perylene fluoranthene benzo(K)fluoranthene fluorene

bis(2-chloroethoxy) methane hexachlorocyclo-pentadiene

bis (2-chloroethyl)-ether hexachlorobutadiene

bis (2-chloroiso-propyl) ether hexachlorocyclo-pentadiene

bis-(2-ethylhexyl) phthalate hexachloroethane

4-bromophenyl phenyl ether indeno-1,2,3-CD)pyrene

butyl benzyl phthalate isphorone
2-chloronaphthalene naphthalene
4-chlorphenyl phenyl ether nitrobenzene

chrysene N-nitrosodi-N-propylamine
di-N-butyl phthalate N-nitrosidi-methylamine
di-N-octyl phthalate N-nitrosodi-phenylamine

dibenzo(A,H) anthracene phenanthrene

1,2-dichlorobenzene pyrene

1,3-dichlorobenzene 1,2,4-trichlorobenzene

D. Effluent Testing for Endocrine Disrupting Chemicals (EDCs). Effluent testing for the EDCs listed in Table 2 below is required three times in the first four and one half years of the permit term, including once in the first year, on the same schedule and under the same conditions as the Expanded Effluent Testing

Page 14 of 31

required in § I.C, above. The results of the testing for EDCs must be submitted to EPA with the next DMR

Table 2 EDC Analytes		
17B-estradiol	nonylphenol	
ethynylestradiol	di(2-ethylhexyl) phthalate	
bisphenol A	triclosan	

E. Landfill Leachate Monitoring.

- 1. The permittee must conduct monitoring of the landfill leachate discharge to the treatment plant at least once in each six month period beginning with the effective date of the permit.
- 2. The monitoring must be conducted at Manhole #2, south of the landfill.
- 3. Samples must be analyzed for BOD₅, pH, ammonia as N, and total suspended solids, plus the parameters listed in §I.C.
- 4. Samples must be grab samples.
- 5. Sampling reports must be retained and made available to EPA or ADEC inspectors upon request and must be submitted to EPA with the next permit application (at least 180 days before the expiration of this permit).
- **F. Surface Water Monitoring.** The permittee must conduct surface water monitoring at two locations as detailed below. Monitoring should begin in the first month after effective date of the permit and continue **once in each calendar quarter** as required below for the duration of the permit and any extensions. The program must meet the following requirements:

1. Sampling Locations

a. Station 1 – In St. Paul Harbor completely outside the influence of the outfall. A description of the location and justification for its selection must be submitted with the first annual report for surface water sampling. To the extent practicable, samples should be taken at the same location each time and should include all parameters as listed in Table 3.

Permit No.: AK-002064-8 Page 15 of 31

 $100 \, \mu g/l^4$,6

 $0.5 \, \mu g/l^4$

 $0.5 \, \mu g/l^4$

 $1.8 \,\mu g/l^4$

Table 3: Surface Water Monitoring Requirements at Station 1 (outside the influence of the outfall) **Sample Method Detection** Sample Parameter **Frequency Units Type** Level Quarterly рΗ s.u. grab $50~\mu g/l^4$ Total Ammonia as N μg/l Quarterly grab Temperature °C Quarterly grab Salinity % Quarterly grab

Quarterly

Quarterly

Quarterly

Quarterly

mg/l

mg/l

mg/l

mg/l

b. Station 2 – In St. Paul Harbor at the edge of the zone of initial dilution, five meters horizontally from the point on the water's surface that is directly above the outfall. To the extent practicable, samples should be taken at the same location each time and should include all parameters as listed in Table 4 below.

grab

grab

grab

grab

Table 4: Surface Water Monitoring Requirements at Station 2 (five meters horizontally from the outfall)					
Sample Sample Method Detection Parameter Units Frequency Type Level					
рН	s.u.	Quarterly	grab		
Total Residual Chlorine ⁷	mg/l	Quarterly	grab	100 μg/l ⁴ , ⁸	
Dissolved oxygen	mg/l	Quarterly	grab	2.0 mg/l	
Fecal coliform	#/100 ml	Quarterly	grab		

⁴ If all previous tests have shown positive values at levels above the method detection level of a less sensitive method, the permittee may request EPA's permission to use the less sensitive method.

Total Residual Chlorine⁵

Copper

Nickel

Zinc

⁵ If chlorination is used for disinfection of the effluent.

⁶ This is a minimum level, the level at which the approved methods should give a quantifiable result.

⁷ If chlorination is used for disinfection of the effluent.

This is a minimum level, the level at which the approved methods should give a quantifiable result.

Page 16 of 31

2. Surface water sample collection must occur on the same day as influent and effluent sample collection.

- 3. Surface water samples must be <u>grab</u> samples.
- 4. Quality assurance/quality control plans for all surface water monitoring must be documented in the Quality Assurance Plan required in §I.G, "Quality Assurance Plan".
- 5. Surface water monitoring results must be submitted to EPA and ADEC annually by January 31 for monitoring in the previous calendar year. At a minimum, the report must include the following:
 - a. Permit # and facility name.
 - b. Dates of sample collection and analyses.
 - c. Results of sample analysis.
 - d. Relevant QA/QC information.
- **G. Quality Assurance Plan (QAP)**. The permittee must develop or update a quality assurance plan (QAP) for all monitoring required by this permit within 90 days of the effective date of this permit. Within 120 days of the effective date of this permit, the QAP must be implemented, and EPA and ADEC must be notified in writing that the QAP has been developed and implemented. Any existing QAPs may be modified to fulfill the requirements under 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 which is specified in these documents.
 - 3. The permittee must amend the QAP whenever there is a modification in methods for sample collection, sample analysis, or other procedure addressed by the QAP or a change in the guidance cited above.
 - 4. Copies of the QAP must be kept on site and made available to EPA and ADEC upon request.
- **H. Facility Planning Requirement.** Each month, the permittee must compute an annual average value for the flow, BOD₅ loading, and TSS loading entering the facility based on the previous twelve months data or all data available, whichever

Page 17 of 31

is less. If the facility has completed a plant upgrade that affects the facility planning values listed in Table 5, only the data collected after the upgrade should be used in determining the annual average value.

When the annual average values exceed 85% of the facility planning values listed in Table 5, the permittee must develop a facility plan and schedule within one year from the date of the first exceedence. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits and will be made available to EPA or authorized representative upon request.

Table 5 - Facility Planning Thresholds				
<u>Criteria</u> <u>Value</u> <u>Units</u>				
Average Flow	1.5	mgd		
Influent BOD ₅ Loading	889	lbs/day		
Influent TSS Loading	978	lbs/day		

II. 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 Part I.A. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph II.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with paragraph II.D ("Additional Monitoring by Permittee").

B. Reporting of Monitoring Results. The permittee must summarize monitoring results each month on the DMR form (EPA No. 3320-1) or equivalent or forms provided or specified by the Regional Administrator of EPA Region 10 (Regional Administrator) for reporting results of monitoring of sludge use or disposal practices. The permittee must submit reports monthly, postmarked by the 10th day of the following month. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part IV.E. of this permit

Page 18 of 31

("Signatory Requirements"). The permittee must submit the legible originals of these documents to EPA Region 10 at the following address:

United States Environmental Protection Agency Region 10 1200 Sixth Avenue, OCE-133 Attn: PCS Data Entry Team Seattle, Washington 98101

Copies of the reports must also be submitted to the Wastewater Discharge Permits Program Manager, Alaska Department of Environmental Conservation at the following address:

Alaska Department of Environmental Conservation Wastewater Discharge Program Manager 555 Cordova Street Anchorage, Alaska 99501

- C. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 Code of Federal Regulations (CFR) §136 or, in the case of sludge use or disposal, approved under 40 CFR §503, 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 DMRs or sludge reporting forms specified by the Regional Administrator.

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

- **E. Records Contents**. Records of monitoring information must include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the name(s) of the individual(s) who performed the sampling or measurements;
 - 3. the date(s) 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 this NPDES permit,

Page 19 of 31

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 to EPA at (206) 553-1846, as soon as possible, but at least within 24 hours of 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 Part III.F., "Bypass of Treatment Facilities");
 - c. any upset that exceeds any effluent limitation in the permit (See Part III.G., "Upset Conditions"); or
 - d. any violation of a maximum daily or an instantaneous maximum discharge limitation for any of the pollutants in Table 1 of Part I.A; or
 - 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 Part II.G.1. 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; and
 - 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

Page 20 of 31

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 at (206) 553-1846.

- 4. Reports must be submitted to the EPA address in Part II.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 monitoring reports for Part II.B ("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Part II.G.2 ("Twenty-four Hour Notice of Noncompliance Reporting").
- **I. Notice of New Introduction of Pollutants**. The permittee must provide notice to the Director of the Office of Compliance and Enforcement of:
 - 1. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act (federal effluent guidelines) if it were directly discharging those pollutants; and
 - 2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this 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 Treatment works, and
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the Treatment works.
 - 4. The permittee must submit the notification to EPA at the following address:

U.S. EPA Region 10 Attn: NPDES Permits Unit Manager 1200 Sixth Avenue, OWW-130 Seattle, WA 98101

J. 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 no later than 14 days following each schedule date.

Page 21 of 31

III. 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 §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 of EPA (Administrator) for violating section 301, 302, 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. 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

Page 22 of 31

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 to 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.
- Knowing Endangerment. Any person who knowingly violates c. 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.

Page 23 of 31

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 of this Part.

2. Notice.

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice to EPA at the address in §II.B, 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 Part II.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:
 - 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

Permit No.: AK-002064-8 Page 24 of 31

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. EPA may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator determines that it will meet the three conditions listed above in §III.F.3.a.

G. Upset Conditions

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with 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 a 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 Part II.G, "Twenty-four Hour Notice of Noncompliance Reporting;" and
 - d. The permittee complied with any remedial measures required under Part III.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 and with standards for sewage sludge use or disposal established under section 405(d) of the Act within the time provided in the regulations that establish those

Page 25 of 31

standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

- I. Planned Changes. The permittee must give notice to EPA and ADEC at the addresses in § II.B 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 subject neither to effluent limitations in the permit nor to notification requirements under Part II.I ("Notice of New Introduction of Pollutants").
- **J. Anticipated Noncompliance**. The permittee must give advance notice to the Director of the Office of Compliance and Enforcement at the address in § II.B., above, of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.
- **K. Warning Sign Installation**. A minimum of one warning sign shall be placed on the shoreline near the outfall line within 90 days after the effective date of this permit. The sign shall state that secondary treated domestic wastewater is being discharged and shall provide the name and owner of the facility and a contact number for additional information. The sign shall be maintained at this location for the duration of this permit and any extensions.

Page 26 of 31

IV. 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.
- **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, Indian tribe, state, federal, 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;

Permit No.: AK-002064-8 Page 27 of 31

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 EPA at the address specified in § II.B
- 3. Changes to authorization. If an authorization under Part IV.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or for environmental matters for the company, a new authorization satisfying the requirements of Part IV.E.2. must be submitted to EPA at the address specified in § II.B 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 EPA Administrator or an authorized representative (including an authorized contractor acting as a

Page 28 of 31

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.
- **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 notice to the Director of the Office of Water and Watersheds as specified in § II.I.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).
- **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.
- **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 Regional Administrator 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 this permit or controls a pollutant or practice not limited in this permit.

Page 29 of 31

V. **DEFINITIONS**

A. "ADEC" means Alaska Department of Environmental Conservation.

- B. "Act" means the Clean Water Act.
- C. "Administrator" means the Administrator of the EPA, or an authorized representative.
- D. "Average monthly effluent 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.
- E. "BOD₅" means a measurement of the amount of oxygen utilized by the decomposition of organic material over a 5 day period in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.
- F. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- G. "°C" means degrees Celsius.
- H. "CFR" means Code of Federal Regulations.
- I. "DMR" means discharge monitoring report.
- J. "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.
- K. "Director of the Office of Compliance and Enforcement" means the Director of the EPA Region 10 Office of Compliance and Enforcement.
- L. "Director of the Office of Water and Watersheds" means the Director fo the EPA Region 10 Office of Water and Watersheds.
- M. "EPA" means the United States Environmental Protection Agency.
- N. "Fed. Reg." means <u>Federal Register</u>, a daily compilation of new and proposed federal regulations.

Page 30 of 31

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

- P. "IC₂₅" (inhibition concentration) means a point estimate of the toxicant concentration that causes a 25% percent reduction in a non-quantal biological measurement.
- Q. "Indirect discharger" means a source that introduces pollutants into a POTW, or treatment works treating domestic sewage, from any non-domestic source regulated under §307(b), (c) or (d) of the Act.
- R. "lbs/day" means pounds per day.
- S. "Maximum daily effluent limitation" means the highest allowable "daily discharge."
- T. "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.
- U. "MGD" means million gallons per day.
- V. "mg/l" means milligrams per liter.
- W. "ML" means minimum level, the minimum level at which the instrumentation must give recognizable result (background corrected) and acceptable calibration points.
- X. "NPDES" means National Pollutant Discharge Elimination System.
- Y. "NOEC" means no observable effect concentration.
- Z. "pH" means a measure of the hydrogen ion concentration of water or wastewater, expressed as the negative log of the hydrogen ion concentration in mg/l. A pH of 7 is neutral; a pH less than 7 is acidic; a pH greater than 7 is basic.
- AA. "POTW" means publicly owned treatment works, owned by a state or municipality, including any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature; it also includes pipes and other conveyances only if they convey wastewater to a POTW treatment plant.
- BB. "Pollutants" means, among other things, solid waste, sewage, garbage, chemical wastes, biological materials, heat, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

Page 31 of 31

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

- DD. "QA/QC" means quality assurance/quality control.
- EE. "QAP" means quality assurance plan.
- FF. "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.
- GG. "TIE" means toxicity identification evaluation.
- HH. "TRE" means toxicity reduction evaluation.
- II. "TSS" means total suspended solids.
- JJ. "TU_c" means chronic toxic units, where $TU_c = 100/NOEC$.
- KK. "24-hour composite" sample means a combination of at least 8 discrete samples collected at equal time intervals from the same location, over a 24 hour period. 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*.
- LL. "U.S.C." means United States Code.
- MM. "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.
- NN. "West Coast Methods" means 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.
- OO. "WET" means whole effluent toxicity.