Permit No.: AK-002144-0

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

AUTHORIZATION TO DISCHARGE
UNDER THE
NATIONAL POLLUTION 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", the

The City of Ketchikan
Charcoal Point Wastewater Treatment Plant

is authorized to discharge from a facility located at **Ketchikan, Alaska** (latitude: 55E 21: 22"; longitude: 131E 41: 46")

to receiving waters named **Tongass Narrows**,

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

in accordance with the specific limitations, monitoring requirements, management practices, and other conditions set forth herein.

This permit shall become effective January 29, 2001

This permit and the authorization to discharge shall expire at midnight, January 29, 2006

Signed this 27th day of December, 2000.

/s/ Randall F. Smith
Randall F. Smith, Director
Office of Water, Region 10
U.S. Environmental Protection Agency

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I. SPECIFIC LIMITATIONS AND REQUIREMENTS

A. Effluent Limitations

1. During the effective period of this permit, the permittee is authorized to discharge from outfall 001, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.

2. There shall be no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.

3. The pH shall not be less than 6.5 standard units nor greater than 8.5 standard units.

4. The following effluent limits shall apply at all times:

Table 1. EFFLUENT LIMITATIONS

Effluent Parameter	Unit of Measurement	Monthly Average	Weekly Average	Maximum Daily
Five day Biochemical Oxygen Demand (BOD_5)	mg/L	146[1]	---	---
	lbs/day	7,400	---	---
Total Suspended Solids (TSS)	mg/L	129[1]	---	---
	lbs/day	7,746	---	---
Fecal Coliform Bacteria	colonies/100 mL	1.0×10^6	1.25×10^6	1.5×10^6
Total Copper	Fg/L lbs/day	157[2] 9.43	---	290 17.4
Total Zinc	Fg/L lbs/day	4,682[2] 281	---	9,384 563

Notes:
1 The average monthly percent removal shall be greater than or equal to 30 percent.
2 Reporting is required within 24-hours if the maximum daily limitation is violated (see Part II.G.).

B. Monitoring Requirements

1. Overview

The permittee shall implement the plant influent/effluent, water quality, biological, and toxics control monitoring programs as described below. The primary objectives of these programs are as follows:

- Determine compliance with the National Pollutant Discharge Elimination System (NPDES) Permit
- Determine compliance with State water quality criteria
- Aid in assessing water quality at discharge point
- Characterize toxic substances
- Monitor plant performance
- Determine compliance with the regulatory criteria of Section 301(h) of the Clean Water Act
- Determine level of bacteria concentration in nearshore waters
- Monitor for changes in sediment quality (organic enrichment, grain size distribution alteration, and pollutant contamination)
- Determine if pollutants from the discharge are accumulating in exposed biological organisms
- Provide data for evaluating reissuance of this permit

2. Annual Reporting

In addition to the monthly Discharge Monitoring Report (DMR) required under Part II.C. of this permit, an annual written report, covering the previous calendar year, shall be submitted to Environmental Protection Agency (EPA) by **January 15** of each year. The annual report shall contain summaries of the receiving water quality monitoring data, and any sediment analyses or bioaccumulation results if required in the previous year. In addition to summarizing the data, the permittee shall also evaluate and interpret data in relation to the magnitude and ecological significance of observed changes in the parameters measured. Potential changes in water quality, sediment chemistry, and biological parameters over time and with distance from the outfall, shall be addressed. All reports will address compliance with water quality standards by using appropriate descriptive and statistical methods to test for and to describe any impacts of the effluent on water quality.

3. Influent and Effluent Monitoring Requirements

During the effective period of this permit, the following monitoring requirements shall apply:

Table 2. INFLUENT/EFFLUENT MONITORING REQUIREMENTS

Effluent Parameter[1]	**Sample Location**	**Sample Frequency**	**Sample Type**
Flow, mgd	influent	continuous	recorder
five-day biochemical oxygen demand (BOD_5), mg/L	influent & effluent[2]	1/week	24-hour composite
Total Suspended Solids (TSS), mg/L	influent & effluent[2]	1/week	24-hour composite
pH, s.u.[3]	effluent	1/week	grab
Fecal Coliform Bacteria, colonies/100ml	effluent	1/week	grab
Total Ammonia as N, mg/L	effluent	1/month[4]	24-hour composite
Total Copper, Fg/L	effluent	1/month	24-hour composite
Total Zinc, Fg/L	effluent	1/month	24-hour composite
Temperature, EC	effluent	1/month	grab
Dissolved Oxygen (DO), mg/L	effluent	1/month[5]	grab
Chronic Whole Effluent Toxicity (WET)[6], TU_c	effluent	2/permit term[7]	24-hour composite

Notes:

1 If the discharge concentration falls below the method detection limit (MDL), the permittee shall report the effluent concentration as "less than {numerical MDL}" on the DMR. Actual analytical results shall be reported on the DMR when the results are greater than the MDL. For averaging, samples below the MDL shall be assumed equal to zero. The permittee shall report the number of non-detects for the month in the "comments section" of the DMR.

2 Influent and effluent sampling is required. Samples shall be collected during the same 24-hour period. The percent BOD_5 and TSS removal shall be reported on each monthly DMR.

3 The permittee shall report the number and duration of pH excursions during the month with the DMR for that month.

4 If after one year of monitoring, the effluent values are less than **43 mg/L** the permittee may discontinue monitoring for total ammonia for the remainder of the permit term.

5 Monitoring is only required during the 1st, 3rd, and 4th years of the permit.

6 See I.C. for additional sampling requirements.

7 Testing shall occur during the first and fifth years of the permit.

Influent and effluent monitoring results shall be reported monthly as specified in Part II.C. (Reporting of Monitoring Results) with the exception of parameters sampled twice per year, which shall be reported annually as specified in Part I.B.2.

4. Receiving Water Quality Monitoring Requirements

The following parameters shall be measured at the depths, locations, and frequency indicated in Table 3. The turbidity, dissolved oxygen, pH, salinity, temperature, copper, silver, and zinc zone of initial dilution (ZID) is a column of water centered over the outfall diffuser with a radius of 130 meters and depth equal to the water column. The fecal coliform mixing zone is defined as the area contained 30 m above a 3,200 m long (1,600 m on each side of the diffuser running parallel to the shoreline), by 250 m wide rectangle (125 m on either side of the diffuser perpendicular to the shoreline).

Monitoring of turbidity, dissolved oxygen, pH, salinity, temperature, and total ammonia shall be reported on the annual report. Monitoring of fecal coliform, and floating solids, visible foam, oily wastes shall be on monthly DMRs.

Table 3 RECEIVING WATER QUALITY MONITORING

Parameter	**Station Location**	**Depth**	**Monitoring Frequency**
Turbidity, nephelometric turbidity units (NTU)	1000m NW of ZID 1000m SE of ZID <5m NW of ZID boundary <5m SE of ZID boundary	surface, mid-depth, and bottom	Once a month in March, April and October during 1st, 3rd, and 4th year of permit
Dissolved oxygen, mg/L	1000m NW of ZID 1000m SE of ZID <5m NW of ZID boundary <5m SE of ZID boundary	surface, mid-depth, and bottom	Once a month in March, April and October during 1st, 3rd, and 4th year of permit
pH, s.u.	1000m NW of ZID 1000m SE of ZID <5m NW of ZID boundary <5m SE of ZID boundary	surface, mid-depth, and bottom	Once a month in March, April and October during 1st, 3rd, and 4th year of permit
Salinity, ppt	1000m NW of ZID 1000m SE of ZID <5m NW of ZID boundary <5m SE of ZID boundary	surface, mid-depth, and bottom	Once a month in March, April and October during 1st, 3rd, and 4th year of permit

Temperature, EC	1000m NW of ZID 1000m SE of ZID <5m NW of ZID boundary <5m SE of ZID boundary	surface, mid-depth, and bottom	Once a month in March, April and October during 1st, 3rd, and 4th year of permit
Total Ammonia as N, mg/L	Background[1]	surface waters only (above 1.0 m)	Once a month in March, April and October during 1st, 3rd, and 4th year of permit
Copper, Fg/L	Background[1]	surface waters only (above 1.0 m)	Once a month in March, April and October during 1st, 3rd, and 4th year of permit[2]
Zinc, Fg/L	Background[1]	surface waters only (above 1.0 m)	Once a month in March, April and October during 1st, 3rd, and 4th year of permit[2]
Fecal coliform, #/100ml	Mixing zone boundary upstream from discharge between Heliport and East Clump[3] Shoreline between Tanks and Boat Ramp[3] Shoreline near Bore 1[3] Outside the mixing zone near Bore 1[3] Outside the mxing zone between Lee 1 on Revillagigedo Island and International Airport[3] Outside mixing zone upstream from discharge near Tidal flat[3]	surface waters only (above 15-30 cm)	Once a month May through September, once from November to December, and once from February to March for the life of the permit[4]

Notes:

1 The background site shall be outside of the City of Ketchikans mxing zone as well as outside of any other dischargers mixing zones who discharge the same parameter.

2 The permittee shall use the same EPA approved test method for the ambient monitoring as for the effluent monitoring consistent with Section I.C of the permit.

3 See Appendix 1 for monitoring location map. The fecal coliform monitoring shall not exceed 14 FC/100 ml

4 The monitoring may be discontinued after the first two years, upon EPA or ADEC's approval, if the results indicate that the water quality standards have not been exceeded due to the quality of the discharge. The monitoring must start again if disinfection begins and may be discontinued after one year if the results indicate the water quality standards have not been exceeded outside of the mixing zone due to the quality of the dishcarge. If monitoring can not be conducted due to incremental weather during November/December, or February/March, an explanation shall be attached to the monthly DMR.

5. Biological Monitoring for Benthic Infauna and Sediment Analyses

Sediment analyses for total volatile solids (TVS) and a benthic survey shall be conducted at least once during the effective period of this permit. The sampling shall be coordinated, to the extent practicable, with the sampling times for the water quality monitoring program and shall be conducted whenever maintenance dives are scheduled. Samples shall be collected from the following four stations:

- the southeastern boundary of the ZID,
- inside the ZID near the middle of the diffuser,
- and two reference stations at least 1000 m northwest and southeast of the outfall.

One benthic sample and two TVS samples shall be collected at each station.

If sediment samples are collected from gravel or cobble substrates, analyses for TVS shall be done on the finer size fractions (silt and clay fractions, combined).

Benthic samples shall be stored. Analyses may be required if the EPA determines that substantial changes have occurred in TVS content of the sediments around the outfall. The stored samples for benthic community analysis shall be inspected every two to three months and any alcohol which has evaporated from the jars shall be replaced.

Data analyses for TVS shall be presented in the annual written report as mean values and standard deviations by stations.

6. Monitoring Program Plan including Quality Assurance Requirements

a. Within **120 days of the effective date of this permit**, the permittee shall submit to the EPA and ADEC (at the address found at Part II.C) a Monitoring Program Plan that includes a Quality Assurance/Quality Control (QA/QC) program. This plan shall address the details of:
   - all monitoring procedures (e.g., methods to insure adequate preservation of composite samples, methods of station location and relocation, identification of sampling equipment),
   - monitoring objectives,

- specific QA/QC procedures including the method detection limits and precision requirements that will insure that program objectives are met,
- how data will be used to evaluate the monitoring objectives,
- name(s), address(es), and telephone number(s) of the laboratories, used by or proposed to be used by the permittee, and
- other activities designed to achieve data quality goals for the monitoring programs.

b. The document, *Guidance for Preparation of Quality Assurance Project Plans*, EPA, Region 10, Quality and Data Management Program, QA/G-5, may be used as a reference guide in preparing the QA/QC program. This document is available at www.epa.gov/r10earth/offices/oea/qaindex.htm.

c. The permittee shall amend the Monitoring Program Plan whenever there is a modification in the sample collection, sample analysis, or other conditions or requirements of the plan. Amendments shall be sent to EPA at the address found in Part II.C.

d. Copies of the Monitoring Program Plan shall be kept on site and shall be made available to EPA and ADEC upon request.

C. Method Detection Limits. For all monitoring, the permittee shall use methods that can achieve a method detection limit (MDL) equal to 0.1 times the effluent limitation or the most sensitive EPA approved method, whichever is greater. If the analytical result for any sample is below the MDL, the permittee shall report "less than {numeric MDL} on the DMR. For purposes of averaging results, the permittee shall use 0 for all values below the MDL.

D. Whole Effluent Toxicity Testing Requirements.

The permittee shall conduct chronic toxicity tests on 24-hour composite effluent samples during the first and fifth years of the permit.

1. Organisms and Protocols

a.. The permittee shall conduct tests with a vertebrate and two invertebrate species, as follows for the first three suites of tests. After the screening period, monitoring shall be conducted using the most sensitive species only.

Vertebrate: Topsmelt, *Atherinops affinis* (survival and growth).

Invertebrate: Bivalve species, mussel, *Mytilis spp*. (survival and growth) or Pacific oyster, *Crassostrea gigas* (larval development test), and

Purple urchin, *Strongylocentrotus purpuratus* or sand dollar, *Dendraster excentricus* (fertilization test)

b. The presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA/600/4-87/028, May 1988, and/or *West Coast Marine Methods Manual, First Edition*, Eds. Chapman, G.A., D.L. Denton, and J.M. Lazorchak, EPA/600/R-95-136.

2. Results shall be reported in TUc (chronic toxic units). TUc = 100/No Observed Effect Concentration.

3. Toxicity Triggers. For the purposes of determining compliance with Paragraphs 5 and 6 below, additional chronic toxicity testing requirements are triggered when chronic toxicity is greater than 3.7% effluent or 27 TUc.

4. Quality Assurance

a. A series of five dilutions and a control shall be tested. The series shall include the concentration of the effluent at the edge of the ZID. The concentration of the effluent at the edge of the ZID is 1.0%. The dilution series shall also include two dilutions above 1.0%, and two dilutions below 1.0%.

b. Concurrent testing with reference toxicants shall also be conducted if organisms are not cultured in-house. Otherwise, monthly testing with reference toxicants is sufficient. Reference toxicants shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration and type).

c. If the effluent tests do not meet all test acceptability criteria as specified in the manual, then the permittee must re-sample and re-test as soon as possible.

d. Control and dilution water shall be synthetic, moderately hard laboratory water, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall 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 as dilution water.

5. Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE) Plan

The permittee shall submit to the EPA a copy of the permittee's initial investigation TRE workplan within **90 days of the effective date of this permit**. This plan shall describe the steps the permittee intends to follow in the event that chronic toxicity as described in Part I.C.3. above, is detected, and should include at a minimum:

a. a description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;

b. a description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and

c. if a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or other).

6. Accelerated Testing

a. If chronic toxicity as defined in Part I.C.3. above is detected during the quarterly tests, the permittee shall implement the initial investigation workplan. If implementation of the initial investigation workplan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is detected in this additional test, then the following Part I.C.6.b. shall apply.

b. If toxicity is detected as defined in Part I.C.3. in the test required in Paragraph a. above, then the permittee shall conduct six more tests, biweekly (every two weeks), over a twelve-week period. Testing

shall commence within two weeks of receipt of the sample results of the exceedance.

7. Toxicity Reduction Evaluation and Toxicity Identification Evaluation

a. If chronic toxicity as defined Part I.C.3. is detected in any of the six additional tests required under Part I.C.6.b., then, in accordance with the permittee's initial investigation workplan and EPA manual EPA 833-B-99-002 (*Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*), the permittee shall initiate a TRE within **fifteen (15) days of receipt of the sample results of the exceedance**. The permittee will develop as expeditiously as possible a more detailed TRE workplan, which includes:

i. further actions to investigate and identify the cause of toxicity;

ii. actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and

iii. a schedule for these actions.

b. The permittee may initiate a TIE as part of the overall TRE process described in the EPA acute and chronic TIE manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

c. If none of the six tests required under Part I.C.7.b. above indicates toxicity, then the permittee may return to the normal testing frequency.

d. If a TIE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

8. Reporting

a. The permittee shall submit the results of the toxicity tests, including any accelerated testing conducted during the month, in TUc with the DMR for the month following the month in which the test is conducted. If an initial investigation indicates the source of toxicity

and accelerated testing is unnecessary, pursuant to Part I.C.6., then those results shall also be submitted with the DMR for the quarter in which the investigation occurred.

b. The full report shall be submitted by the end of the month following the month in which the DMR is submitted.

c. The full report shall consist of: the results; the dates of sample collection and initiation of each toxicity test; the triggers as defined in Part I.C.3. above; the type of activity occurring; the flow rate at the time of sample collection; and the chemical parameter monitoring required for the outfall(s) as defined in the permit.

d. Test results for chronic tests shall also be reported according to the chronic manual chapter on Report Preparation, and shall be attached to the DMR.

E. Nonindustrial Source Control Program

Section 301(h) regulations require that the permittee implement a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW. Elements of the public education program shall include:

- development and dispersement of information containing non-hazardous alternatives to hazardous household products and pesticides;

- proper and free disposal of hazardous wastes in local newspapers including disposal guidelines specifying what toxic pollutants can and cannot be discharged to the sewer system; and

- disbursement of information to the Gateway Borough as septage is collected.

Reporting: An annual report on the nonindustrial source control program shall be submitted by **January 15th** of the following year. This report shall summarize the actions taken, and their effectiveness, to control nonindustrial sources of toxic pollutants and pesticides.

F. Notification of Primary Treated Discharge

A sign shall be placed on the shoreline, near the mixing zone and outfall line that states that primary treated domestic wastewater is being discharged, that mixing

zones do exist and that certain activities should not take place within the mixing zones. The sign shall also include the name and owner of the facility, approximate location and size of the mixing zones and give a facility contact phone number for additional information.

G. Operation and Maintenance Plan

1. Within **180 days after the effective date** of this permit, the permittee shall review/develop and implement its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs); the plan must be reviewed annually thereafter. BMPs include measures that prevent or minimize the potential for the release of pollutants to the Tongass Narrows. The O&M Plan shall be retained on site and made available to EPA and ADEC upon request.

2. The permittee shall develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities of controls in the O&M Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components:

- Spill prevention and control;
- Optimization of chemical usage;
- Preventive maintenance program;
- Minimization of pollutant inputs from industrial users;
- Research, develop and implement a public information and education program to control the introduction of household hazardous materials to the sewer system; and
- Water conservation.

H. Design Criteria Requirement

The design criteria for the permitted facility is as follows:

Table 5 - Design Criteria for the City of Ketchikan

Criteria	Value	Units
Average Flow	7.2	mgd

Each month, the permittee shall compute an annual average value for flow entering or exiting the facility based on the previous twelve months data. If the average annual value exceeds 85% of the design criteria values listed in Table 5, the

permittee shall notify EPA and develop a facility plan and schedule within **one year from the date of first exceedance**. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits and will be made available to the Director or authorized representative upon request.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall 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 shall collect additional samples 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 shall 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 shall collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples shall be analyzed in accordance with paragraph II.B ("Monitoring Procedures"). The permittee shall report all additional monitoring in accordance with paragraph II.D ("Additional Monitoring by the Permittee").

B. 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 alternate methods have been approved by the EPA Water Office Director.

C. Reporting of Monitoring Results. Monitoring results shall be summarized each month on the DMR form. The reports shall be submitted monthly and are to be postmarked by the 15th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part IV.J. Signatory Requirements, and submitted to the Director, Office of Water and the State agency at the following addresses:

original to: United States Environmental Protection Agency
Region 10
NPDES Compliance Unit
1200 Sixth Avenue, OW-133
Seattle, Washington 98101
(206) 553-1280 fax

copy to: Alaska Department of Environmental Conservation
Division of Air and Water Quality
State Discharge Permit & Certification Plan Program
410 Willoughby Avenue Suite #303

Juneau, AK 99801-1795

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

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

E. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements,

2. The individual(s) who performed the sampling or measurements,

3. The date(s) analyses were performed,

4. 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 shall 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, and records of all data used to complete the application for this permit, for a period of at least **three years** from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time. Data collected on-site, copies of DMRs, and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The following occurrences of noncompliance shall be reported to EPA and ADEC by telephone within **24 hours** from the time the permittee becomes aware of the circumstances:

a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part **III.G. Bypass of Treatment Facilities**),

b. Any upset which exceeds any effluent limitation in the permit (See Part **III.H. Upset Conditions**), or

c. Violation of a maximum daily discharge limitation for those toxic or hazardous pollutants identified within Table1 of Section I.A.

2. A written submission shall also be provided to EPA and ADEC within **five days** of the time that the permittee becomes aware of the circumstances. The written submission shall 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 re-occurrence of the noncompliance.

3. The Director 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 Unit in Seattle, Washington, by phone, (206) 553-1846.

4. Reports shall be submitted to the addresses in Part **II.C. Reporting of Monitoring Results**.

H. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.C. are submitted. The reports shall contain the information listed in Part II.E.

I. Inspection and Entry. The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit,

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit,

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

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; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions

1. Civil and Administrative Penalties. Any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed the maximum amounts authorized by Sections 309(d) and 309(g) 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).

2. Criminal Penalties

a. Negligent Violations. Any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(1) of the Act.

b. Knowing Violations. Any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(2) of the Act.

c. Knowing Endangerment. Any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 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 and/or imprisonment as specified in Section 309(c)(3) of the Act .

d. False Statements. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(4) of the Act.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize, or prevent, any discharge, or sludge use or disposal, in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance. The permittee shall 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 quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances. Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters

shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which 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 section.

2. Notice

a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least **10 days** before the date of the bypass.

b. Unanticipated Bypass. The permittee shall 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 may take enforcement action against a 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 judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under paragraph 2 of this section.

b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determined that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. 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 requirements of paragraph 2 of this section are met. 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. Necessary upset demonstration conditions. A permittee who wishes to establish the affirmative defense of upset shall 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.

IV. GENERAL REQUIREMENTS

A. Notice of New Introduction of Pollutants

1. The permittee shall provide adequate notice to the Director, Office of Water, and ADEC of:

a. 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 if it were directly discharging those pollutants, and

b. 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 the permit.

2. For the purposes of this section, adequate notice shall include information on:

a. The quality and quantity of effluent to be introduced into such treatment works, and

b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

B. Control of Undesirable Pollutants. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:

1. Wastes which will create a fire or explosion hazard in the treatment works;

2. Wastes which will cause corrosive structural damage to the treatment works, but in no case, wastes with a pH lower than 5.0, unless the treatment works is designed to accommodate such wastes;

3. Solid or viscous substances in amounts which cause obstructions to the flow in sewers, or interference with the proper operation of the treatment works;

4. Waste waters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency; and

5. Any pollutant, including oxygen demanding pollutants (e.g., BOD, etc.) released in a discharge of such volume or strength as to cause interference in the treatment works.

C. Planned Changes. The permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. Notice is also required when the alteration or addition results in a

significant change in the permittee's sludge use or disposal practices, including notification of additional use or disposal sites not reported during the permit application process.

D. Anticipated Noncompliance. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

E. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. 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.

F. Duty to Reapply. If the permittee wishes 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. The application should be submitted at least **180 days before the expiration date** of this permit. The application shall include an updated industrial user survey and priority pollutant scan.

G. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director 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 shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

H. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit such facts or information.

I. Signatory Requirement. All applications, reports or information submitted to the Director and ADEC shall be signed and certified.

1. All permit applications shall 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, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director or ADEC shall 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 and submitted to the Director and ADEC, and

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 organization.

3. Changes to authorization. If an authorization under Part IV.I.2 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 Part IV.I.2. must be submitted to the Regional Administrator and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

J. Certification. Any person signing a document under this section shall 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.*"

K. Availability or Reports. Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be

available for public inspection at the offices of the Director. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

L. 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 private infringement of federal, state, or local laws or regulations.

M. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

N. Transfers. This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Director at least **30 days** in advance of the proposed transfer date,

2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them, and

3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

O. 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.

P. Reopener Provision. This permit is subject to modification, revocation and reissuance, or termination at the request of any interested person (including the permittee) or upon EPA initiative. However, permits may only be modified, revoked or reissued, or terminated for the reasons specified in 40 CFR Parts 122.62, 122.63 or 122.64, and 40 CFR Part 124.5. This includes new information which was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance and includes, but is not limited to, future monitoring results. All requests for permit modification must be addressed to the EPA in writing and shall contain facts or reasons supporting the request.

V. DEFINITIONS

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

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

“Biosolids” means any sludge or material derived from sludge that can be beneficially used. Beneficial use includes, but is not limited to, land application to agricultural land, forest land, a reclamation site or sale or give away to the public for home lawn and garden use.

“Chronic toxicity” measures a sublethal effect (e.g., reduced growth, reproduction) in an effluent or ambient waters compared to that of the control organisms.

“Chronic toxic unit (TU_c)” is a measure of chronic toxicity. The number of chronic toxic units in the effluent is calculated as 100/NOEC, where the NOEC is measured in percent effluent.

“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.

A “Grab” sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.

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

“IC_{25}" means the estimated toxicant concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

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

“Method detection limit (MDL)” is the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero as determined by a specific laboratory method (40 CFR 136).

“No observed effect concentration (NOEC)” is the highest concentration of toxicant 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 not statistically significant different from controls.)

“Pathogen” means an organism that is capable of producing an infection or disease in a susceptible host.

"Pollutant," for the purposes of this permit, is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of the EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Sewage sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the incineration of sewage sludge or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR 258.

A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots. Each aliquot shall be a grab sample of not less than 100 mL and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

A "TRE" is a site-specific study conducted in a stepwise process to narrow the search for effective control measures for effluent toxicity.

"Toxic pollutants" are those substances listed in 40 CFR 401.15.

"Pesticides" are Demeton, Guthion, Malathion, Mirex, Methoxychlor and Parathion (as listed in 40 CFR 125.58).

"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.

The "ZID" is the Zone of Initial Dilution. The ZID is defined by the volume of water centered over the outfall diffuser with a width of 60 m, a length parallel to the diffuser of 118 m, and the depth equal to that of the water column above that area.

Appendix 1—Mixing Zone