

Permit No.: AK-000084-1  
Application No.: AK-000084-1

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

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

Tesoro Alaska Petroleum Company  
P.O. Box 3369  
Kenai, Alaska 99611

is authorized to discharge from its petroleum refining facility located near Port Nikiski, Alaska, at the following locations:

<u>Outfall</u>	<u>Receiving Water</u>	<u>Latitude</u>	<u>Longitude</u>
001	Cook Inlet	60° 40' 42" N	151° 23' 38" W

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

This permit shall become effective June 4, 2001

This permit and the authorization to discharge shall expire at midnight, June 5, 2006.

Signed this 1<sup>st</sup> day of May 2001.

Sign by Randall F. Smith \_\_\_\_\_  
Randall F. Smith  
Director  
Office of Water, Region 10  
U.S. Environmental Protection Agency

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## **I. LIMITATIONS AND MONITORING REQUIREMENTS**

During the effective period of this permit, the permittee is authorized to discharge from outfall 001 to Cook Inlet, 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.

Prior to the discharge of wastewater from the first reformer regeneration under this permit, the permittee shall submit written confirmation to EPA that the activated carbon treatment process is installed and operational.

### **A. Effluent Limitations and Monitoring Requirements**

1. The permittee shall not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.
2. The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units. The total time outside of the required range shall not exceed 7 hours and 26 minutes in any calendar month, and no individual excursion shall exceed 60 minutes.
3. The permittee shall limit and monitor discharges from outfall 001 as specified in Table 1 below. Outfall 001 is the final discharge to Cook Inlet, which includes all treated refinery wastewater and treated remediation wastewater. All figures represent effluent limits not to be exceeded. The permittee shall comply with the following effluent limits at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

<b>Table 1 - Effluent Limitations and Monitoring Requirements for Outfall 001</b>				
Parameter	Effluent Limitations		Monitoring Requirements	
	Maximum Daily	Monthly Average	Sample Frequency	Sample Type
Five Day Biochemical Oxygen Demand (BOD <sub>5</sub> , lb/day)	314	173	Weekly	Composite
Total Suspended Solids (TSS, lb/day) - October through May	223	141	Weekly	Composite
Total Suspended Solids (TSS, lb/day) - June through September	349	223	Weekly	Composite
Oil and Grease (O&G, lb/day)	67	38	Weekly	Grab
Chemical Oxygen Demand (COD, lb/day)	2002	1084	Weekly	Composite
Ammonia as N (NH <sub>3</sub> -N, lb/day)	143	65	Weekly	Composite
Total Ammonia (NH <sub>3</sub> , mg/l)	100	43	Weekly	Composite
Sulfide (lb/day)	2.05	0.91	Weekly	Grab
pH	See I.A.2.	See I.A.2.	Continuous	Recording
Phenolic Compounds (lb/day)	1.34	0.62	Monthly	Grab
Total Chromium (Cr, lb/day)	2.43	1.29	Monthly	Composite
Hexavalent Chromium (Cr <sup>+6</sup> , lb/day)	0.19	0.10	Monthly	Composite
Total Aromatic Hydrocarbons (TAH, ug/l)	936	467	Weekly	Grab
Total Aqueous Hydrocarbons (TAqH, ug/l)	1400	700	Weekly	Grab
Acute Whole Effluent Toxicity (TU <sub>a</sub> )	---	---	Semi-Annual <sup>3</sup>	Composite
Chronic Whole Effluent Toxicity (TU <sub>c</sub> )	---	---	Semi-Annual <sup>3</sup>	Composite
Cyanide (CN, ug/l)	---	---	Annual	Grab
Total Mercury (Hg, ng/l)	---	---	Annual <sup>4</sup>	Composite
Final Effluent Flow	---	---	Continuous	Recording
Catalyst Regeneration Flow	---	---	See Note 1	See Note 1
Dioxin (2,3,7,8-TCDD, pg/l)	---	---	See Note 1	See Note 1
Dioxin/Furan Congeners (pg/l)	---	---	See Note 1	See Note 1
Biocides	---	---	See Note 2	See Note 2

**Table 1 - Notes**

1 During reformer catalyst regeneration operations, composite samples shall be taken of the treated wastewater from the reformer catalyst regeneration process. The composite sample shall be a flow-proportioned mixture of not less than eight discrete aliquots, equally spaced over the discharge period. 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*.

The permittee shall analyze the composite sample for dioxin/furan congeners using EPA method 1613. Concentrations of all individual congeners analyzed using this method (tetra- through octa-chlorinated dioxins and furans) shall be reported.

The final discharge of 2,3,7,8-TCDD shall be reported as follows:

$$\text{Discharge} = C \cdot (Q1/Q2)$$

where,

C = 2,3,7,8-TCDD concentration in composite sample

Q1 = flow of the reformer catalyst regeneration waste stream

Q2 = flow of the final effluent

If the 2,3,7,8-TCDD concentration is below the method detection limit using EPA method 1613, the permittee shall report the discharge as "less than" the value calculated using the detection limit value in the equation above.

2 The permittee shall submit to EPA annually a report of the amounts and types of any biocides used. This report shall be submitted with the December Discharge Monitoring Report (DMR).

3 See Toxicity Testing Requirements (I.B.)

4 Sample analyses for mercury shall achieve a minimum reporting level of 0.5 ng/l (Method 1631).

4. The permittee shall limit and monitor treated discharges from the groundwater remediation project (outfall 001A) as specified in Table 2 below. All figures represent maximum effluent limits. The permittee shall comply with the following effluent limits at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

Table 2 - Effluent Limitations and Monitoring Requirements for Outfall 001A				
Parameter	Effluent Limitations		Monitoring Requirements	
	Maximum Daily	Monthly Average	Sample Frequency	Sample Type
Flow (mgd)	---	---	Continuous	Recording
Benzene (ug/l)	5.0	---	Weekly	Grab <sup>1</sup>

<sup>1</sup> Samples shall be collected prior to commingling of treated groundwater remediation effluent with other wastewaters at the facility.

**B. Effluent Toxicity Testing Requirements**

The permittee shall conduct semi-annual chronic toxicity testing and semi-annual acute toxicity testing on samples that are representative of the effluent discharged from outfall 001 in accordance with the subsections below.

1. Chronic Tests

- a. Test Species and Methods. The permittee shall test the effluent each year using the following organisms:

*Mytilis spp.* (mussel) or *Crassostrea gigas* (oyster) - larval development test;

and,

*Strongylocentrotus purpuratus* (urchin) or *Dendraster excentricus* (sand dollar) - fertilization test.

- b. Chronic Toxicity Trigger.

For the purposes of this permit, the chronic toxicity trigger is defined as toxicity greater than 57 TU<sub>C</sub>.

2. Acute Tests

- a. Test Species and Methods. The permittee shall test the effluent twice per year using the following organism:

*Oncorhynchus mykiss* (rainbow trout) - juvenile, less than 2 inches in length

3. Quality Assurance. Toxicity tests shall meet the following quality assurance requirements:

- a. All chronic test methods and quality assurance criteria used shall be in accordance with 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.

For chronic testing, a series of five dilutions and a control shall be tested. The series shall include the dilution associated with the chronic toxicity trigger (1.8%), two dilutions above 1.8%, and two dilutions below 1.8%.

Test results shall be reported in chronic toxic units (see definitions). In addition to reporting TU<sub>C</sub>, the Permittee shall report the NOEC and the EC<sub>25</sub> of the effluent.

- b. All acute test methods and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition (EPA/600/4-90-027F).

For acute testing, a series of five dilutions and a control shall be tested.

Test results shall be reported in acute toxic units (see definitions). In addition to reporting TU<sub>a</sub>, the Permittee shall report the LC<sub>50</sub> of the effluent.

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



d. Tests shall be conducted as follows:

Test Organism(s)	Test Duration	Test Type	Test Solution Renewal	Dilution Water Source
Rainbow Trout	96 hrs	Static	48 hrs	spring water
Urchin/Sand Dollar	40 min	Static	none	natural seawater
Mussel/Oyster	48 hrs	Static	none	natural seawater

- e. A split of each sample collected for toxicity testing shall be analyzed for the parameters that have effluent limitations in Table 1. When the timing of sample collection coincides with that of the sampling required in Table 1, analysis of the split sample will fulfill the requirements of Table 1 as well.
- f. If the effluent tests do not meet all test acceptability criteria as specified in the methods manual, then the permittee must re-sample and re-test as soon as possible. If more than 20% of the reference toxicant tests do not meet all test acceptability criteria as specified in the methods manual, then the permittee must re-sample and re-test as soon as possible.

4. Accelerated testing.

- a. If the chronic toxicity trigger is exceeded in any test, the permittee shall conduct four additional tests, with one test every two weeks over an eight-week period. The first test must be initiated within two weeks of receipt of the test results that indicate an exceedence.
- b. The permittee must notify EPA of the exceedence in writing within two weeks of receipt of the test results that indicate an exceedence. The notification will include the following information:
  - i) A status report on any actions required by the permit, with a schedule for actions not yet completed.

- ii) A description of any additional actions the permittee has taken or will take to investigate and correct the cause(s) of the toxicity.
    - iii) Where no actions have been taken, a discussion of the reasons for not taking action.
  - c. If the permittee demonstrates through an evaluation of facility operations that the cause of the exceedence is known and corrective actions have been implemented, only one accelerated test is necessary. If this test exceeds the toxicity trigger, the TRE requirements in Part 5 shall apply.
  - d. If none of the four accelerated tests exceed the toxicity trigger, the permittee may return to the normal testing frequency.
- 5. Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)
  - a. If the chronic toxicity trigger is exceeded during accelerated testing, the permittee shall initiate a toxicity reduction evaluation (TRE) in accordance with *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070) within two weeks of the exceedence. At a minimum, the TRE will include:
    - i) Further actions to investigate and identify the cause of toxicity,
    - ii) Methods for maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility,
    - iii) Actions the permittee will take to mitigate the impact of the discharge and to prevent future exceedences, and
    - iv) A schedule for these actions.
  - b. If a TRE is triggered prior to completion of the accelerated testing under Part 4, the accelerated testing schedule may be terminated, or used as necessary in performing the TRE.
  - c. At a minimum, any Toxicity Identification Evaluation (TIE) work performed as part of the TRE shall be in accordance with EPA manuals EPA/600/6-91/005F (Phase I), EPA 600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III).

6. Reporting

- a. The permittee shall submit results in a toxicity test report with the discharge monitoring report (DMR) for the month following sample collection.
- b. The report of results shall include all relevant information outlined in Section 10, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, EPA/600-4-91-002, July 1994.
- c. In addition to toxicity test results, the permittee shall report:
  - i) Dates of sample collection and initiation of each test,
  - ii) Trigger value (chronic only),
  - iii) Type of production,
  - iv) Flow rate at the time of sample collection, and
  - v) The results of chemical monitoring on split samples

**C. Ambient Sediment Monitoring Requirements**

1. During the first and fourth year of the permit term, the permittee shall conduct ambient sediment monitoring in the outfall vicinity. The objective of the monitoring program is to determine whether the contaminants discharged by the Tesoro Refinery persist above natural levels in sediments to significantly adverse levels.

Sediment monitoring shall be conducted in accordance with the following requirements:

- a. The permittee shall monitor for the following parameters:
  - i) aliphatic hydrocarbons
  - ii) polycyclic aromatic hydrocarbons (PAH)
  - iii) steranes, diterpanes, and triterpanes
  - iv) total organic carbon (TOC)
  - v) particle grain size (PGS)
  - vi) trace metals

Target analytes and method detection limits shall be consistent with those used in the Cook Inlet Regional Citizens' Advisory Council (CIRCAC) "Environmental Monitoring Program", 1996 and 1997.

- b. Monitoring shall be conducted at a sufficient number of sites within and outside the mixing zone to meet the objective of the monitoring plan (see above). To the extent practicable, the sites established in the first year shall be used in the fourth year.
- c. All quality assurance/quality control plans and station location information for sediment monitoring shall be documented in the permittee's Quality Assurance Plan (see below). Prior to commencement of sediment monitoring, the permittee shall submit the sediment monitoring plan to the ADEC for approval.
- d. A report summarizing the results of the sediment monitoring program shall be submitted with the December DMR for the year of monitoring.

The report shall include the following:

- i) Sampling and laboratory methods used and quality assurance/quality control information
- ii) Discussion of the manner in which the monitoring design and results addressed the objective of the monitoring.
- iii) Interpretive summary of the results. Results of analyses shall be compared to other Cook Inlet sediment monitoring values from the CIRCAC Environmental Monitoring Program studies, and to EPA, NOAA, and State of Washington published PAH and TAH thresholds in marine sediments. Sediment quality guidelines or benchmarks which may be used for comparison include the EPA's draft Sediment Quality Criteria (USEPA, 1993b, c, d), State of Washington marine sediment quality standards - chemical criteria (WDE, 1995), and NOAA's Effects Range-Low and Effects Range-Medium Criteria (Long and Morgan, 1990; Long 1992). If the above guidelines are revised or new guidelines are published, the most recent guideline should be used for comparison.

#### **D. Quality Assurance Plan (QAP)**

The permittee shall develop a quality assurance plan (QAP) for all monitoring required by this permit. The plan shall be submitted to EPA and ADEC for review within sixty days of the effective date of this permit and implemented within 120 days of the effective date of this permit.

1. The QAP shall be designed to assist in planning for the collection and analysis of effluent and ambient samples in support of the permit and in explaining data anomalies when they occur.
2. Throughout all sample collection and analysis activities, the permittee shall 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 shall be prepared in the format which is specified in these documents.
3. The QAP shall include the following:
  - a. Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
  - b. Map(s) indicating each sampling location.
  - c. Qualification and training of personnel.
  - d. Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee.
4. The permittee shall amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
5. Copies of the QAP shall be kept on site and made available to EPA and/or Alaska Department of Environmental Conservation (ADEC) upon request.

## II. BEST MANAGEMENT PRACTICES PLAN

- A. Purpose. Through implementation of the BMP Plan the Permittee shall prevent or minimize the generation and the potential for the release of pollutants from the facility through normal operations and ancillary activities.
- B. BMP Plan. The permittee shall develop and implement a Best Management Practices (BMP) Plan which achieves the objectives and the specific

requirements listed below, and is consistent with the general guidance contained in the publication entitled "Guidance Manual for Developing Best Management Practices (EPA 833-B-93-004, October 1993)" or any subsequent revisions to guidance documentation. A copy of the Plan shall be submitted to EPA and the Alaska Department of Environmental Conservation (DEC) for review within 90 days of the effective date of the permit. The Plan shall be implemented within 180 days of the effective date of the permit.

- C. Objectives. The permittee shall develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.
1. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility shall be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.
  2. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the Plan, the permittee shall ensure proper operation and maintenance of water management and wastewater treatment systems. Plan elements shall be developed in accordance with good engineering practices.
  3. Each facility component or system shall be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination shall include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.
- D. Requirements. The BMP Plan shall include:
1. Plan Components
    - (a) Statement of BMP policy. This statement must include a statement of management commitment to provide the necessary financial, staff, equipment and training resources to develop and implement the BMP plan on a continuing basis.
    - (b) Structure, functions, and procedures of the Best Management Practices Committee.

- (c) Risk identification and assessment.
- (d) Specific best management practices and standard operating procedures to achieve the above objectives.
- (e) Reporting of BMP incidents. The reports shall include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.
- (f) Materials compatibility.
- (g) Good housekeeping.
- (h) Inspections and records.
- (i) Preventative maintenance and repair.
- (j) Security.
- (k) Employee training.
- (l) Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP plan are considered as part of the modifications.
- (m) Final constructed site plans, drawings and maps (including detailed stormwater outfall/culvert configurations).

2. Review and Certification

- (a) Annual review by the plant manager and BMP Committee.
- (b) Certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement shall be certified by the dated signatures of each BMP Committee member. This statement shall be submitted to EPA on or before January 31st of each year of operation under this permit.

3. Specific Best Management Practices

- (a) As part of the BMP Plan for this permit, the permittee shall incorporate by reference and implement the following existing plans:

Tesoro Refinery Spill Prevention Control & Countermeasure Plan

Tesoro Refinery State Contingency Plan (9724-CP-6188)

Tesoro Refinery Safety Manual

- (b). The permittee shall develop and implement specific BMPs to minimize releases of ammonia from the Sour Water Stripper to the refinery wastewater collection system.

- E. Documentation. The Permittee shall maintain a copy of the BMP plan at the facility and make it available to EPA or an authorized representative upon request.
- F. BMP Plan Modification. The permittee shall amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to the receiving waters. Any such changes to the BMP Plan shall be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reported to EPA and ADEC in writing.
- G. Modification for Ineffectiveness. At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.

### III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. **Representative Sampling (Routine and Non-Routine Discharges)**. The permittee shall collect all effluent samples 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 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 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 III.C ("Monitoring Procedures"). The permittee shall report all additional monitoring in accordance with paragraph III.D ("Additional Monitoring by Permittee").

- B. Reporting of Monitoring Results.** The permittee shall summarize monitoring results each month on the Discharge Monitoring Report (DMR). The permittee shall submit reports monthly, postmarked by the 20th day of the following month. The permittee shall sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). The permittee shall submit the legible originals of these documents to the Director, Office of Water, with copies to ADEC and Kenai area Tribes at the following addresses:

United States Environmental Protection Agency  
Region 10  
1200 Sixth Avenue, OW-133  
Seattle, Washington 98101

Alaska Department of Environmental Conservation  
Division of Air and Water Quality  
Industrial Wastewater Permitting  
610 University Ave.  
Fairbanks, Alaska 99709-3643

Kenai Area Tribes  
c/o Native Village of Salamatof  
P.O. Box 2682  
Kenai, Alaska 99611

- C. Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit.

- 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 shall include the results of this monitoring in the calculation and reporting of the data submitted in the DMR. The permittee shall indicate on the DMR whenever it has performed additional monitoring, and shall explain why it performed such monitoring.

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

- E. Records Contents.** All effluent monitoring records shall bear the handwritten signature of the person who prepared them. In addition, all records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the names 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 shall retain records of all monitoring information, including, but not limited to, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Director or ADEC at any time.

- G. Twenty-four Hour Notice of Noncompliance Reporting**

1. The permittee shall report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:

- a. any noncompliance that may endanger health or the environment;
  - b. any unanticipated bypass that results in or contributes to an exceedence of any effluent limitation in the permit (See Part IV.G., "Bypass of Treatment Facilities");
  - c. any upset that results in or contributes to an exceedence of any effluent limitation in the permit (See Part IV.H., "Upset Conditions"); or
  - d. any violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.
2. The permittee shall also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above. 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 recurrence of the noncompliance.
  - e. the results of any monitoring data required under Paragraph III.A, "Representative Sampling (Routine and Non-Routine Discharges)."
3. The Director may, at his sole discretion, waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.
4. Reports shall be submitted to the addresses in Part III.B ("Reporting of Monitoring Results").

**H. Other Noncompliance Reporting.** The permittee shall report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B ("Reporting of Monitoring Results") are submitted. The reports shall contain the information listed in

Part III.G.2 of this permit ("Twenty-four Hour Notice of Noncompliance Reporting").

- I. Changes in Discharge of Toxic Substances.** The permittee shall notify the Director and ADEC as soon as it knows, or has reason to believe:
1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following "notification levels":
    - a. One hundred micrograms per liter (100 ug/l);
    - b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
    - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
    - d. The level established by the Director in accordance with 40 CFR 122.44(f).
  2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following "notification levels":
    - a. Five hundred micrograms per liter (500 ug/l);
    - b. One milligram per liter (1 mg/l) for antimony;
    - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
    - d. The level established by the Director in accordance with 40 CFR 122.44(f).

#### IV. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply.** The permittee shall 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.** 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.

Except as provided in permit conditions in Part IV.G, ("Bypass of Treatment Facilities") and Part IV.H, ("Upset Conditions"), nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

- 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 shall 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 shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that 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 only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances.** Solids, sludges, or other pollutants removed in the course of treatment or control of water and wastewaters 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 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 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 III.G ("Twenty-four Hour Notice of Noncompliance Reporting").
3. Prohibition of bypass.
- a. Bypass is prohibited, and the Director or ADEC may take enforcement action against the permittee for a bypass, unless:
    - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment shall have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
    - (3) The permittee submitted notices as required under paragraph 2 of this Part.
  - b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this Part.

## **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 permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the permittee 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 III.G, "Twenty-four Hour Notice of Noncompliance Reporting;" and
    - d. The permittee complied with any remedial measures required under Part IV.D, "Duty to Mitigate."
  3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. 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 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 III.I ("Changes in Discharge of Toxic Substances").
- K. Anticipated Noncompliance.** The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.



## V. GENERAL PROVISIONS

- A. 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, or 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. The application shall be submitted at least 180 days before the expiration date of this permit.
- C. Duty to Provide Information.** The permittee shall furnish to the Director and ADEC, within the time specified in the request, any information that the Director 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 shall also furnish to the Director or ADEC, upon request, copies of records required to be kept by this permit.
- D. Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit the omitted facts or corrected information.
- E. Signatory Requirements.** 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 company.
3. Changes to authorization. If an authorization under Part V.E.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 paragraph V.E.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.
  4. Certification. Any person signing a document under this Part 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."

- F. Availability of Reports.** Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with this permit shall be available for public inspection at the offices of the the Director and ADEC. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- G. Inspection and Entry.** The permittee shall allow the Director, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

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

**H. Oil and Hazardous Substance Liability.** 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 to which the permittee is or may be subject under Section 311 of the Act.

**I. Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

**J. Severability.** The provisions of this permit are severable. 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.

**K. 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 permittees 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 the notice described in paragraph 3 above is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

- L. 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.
- M. Reopener Clause.** 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 122.62 or 122.64, and 40 CFR 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, including but not limited to future monitoring results. All requests for permit modification must be addressed to EPA in writing and shall contain facts or reasons supporting the request.

## VI. DEFINITIONS

1. "Acute Toxic Unit" is a measure of acute toxicity. The number of acute toxic units in the effluent is calculated as  $100/LC_{50}$ , where the  $LC_{50}$  is measured in percent effluent.
2. "ADEC" means the Alaska Department of Environmental Conservation
3. "Administrator" means the Administrator of the EPA, or an authorized representative.
4. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
5. "Chronic toxic unit" ("TU<sub>c</sub>") 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.
6. "Composite" - See "24-hour Composite".

7. "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.
8. "Director" means the Director of the Office of Water, EPA, or an authorized representative.
9. "DMR" means discharge monitoring report.
10. "EPA" means the United States Environmental Protection Agency.
11. "Final effluent" means effluent downstream from the last treatment unit and at, or upstream from, the point where a permitted outfall enters navigable waters, and through which all waste streams pass that are discharged from the outfall.
12. "Grab" sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
13. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
14. "Method Detection Limit (MDL)" means 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.
15. "Minimum Level (ML)" means the concentration at which the entire analytical system gives recognizable signals and an acceptable calibration point.
16. "Monthly average discharge limitation" means the highest allowable average of "daily discharges" over a calendar month. Compliance with this limitation shall be calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
17. "NOEC" means no observed effect concentration. The NOEC is the highest tested concentration of effluent to which organisms are exposed that causes no observable adverse effect at a specific time of observation.

18. "QA/QC" means quality assurance/quality control.
19. "Regional Administrator" means the EPA Region 10 Regional Administrator, or an authorized representative.
20. "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.
21. "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.
22. "Waste stream" means any non-de minimus stream of pollutants within the permittee's facility that enters any permitted outfall or navigable waters. This includes spills and other unintentional, non-routine or unanticipated discharges.
23. "2,3,7,8-TCDD" is defined as 2,3,7,8-tetrachlorodibenzo-p-dioxin.
24. "24-hour composite" or "composite" sample means a flow-proportioned mixture of not less than 8 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*.