

Permit No.: AK-000050-7
Application No.: AK-000050-7

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",

Alaska Nitrogen Products LLC
P.O. Box 575
Kenai, Alaska 99611

is authorized to discharge from its Kenai facility located at Mile, 21, Kenai Spur Highway, Nikiski, Alaska at the following locations:

<u>Outfall</u>	<u>Receiving Water</u>	<u>Latitude</u>	<u>Longitude</u>
001	Cook Inlet	60° 40' 17" N	151° 23' 17" W

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

This permit shall become effective November 20, 2000

This permit and the authorization to discharge shall expire at midnight, November 20, 2005

Signed this 16th day of October, 2000.

/s/ Mike Bussell for
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.

A. Ammonia and Urea Plant (Outfall 001)

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 6.0 standard units nor greater than 9.0 standard units. Monitoring shall be continuous recording. 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. 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 1 - Outfall 001 Effluent Limitations and Monitoring Requirements				
Parameter	Effluent Limitations		Monitoring Requirements	
	Maximum Daily	Average Monthly	Sample Frequency	Sample Type
Daily Maximum Effluent Flow, million gallons per day (mgd)	—	Report Monthly Ave	Continuous	Recording
Total Ammonia as N, lbs/day	3636 ¹	1849	Weekly	24-hour Composite
Organic Nitrogen as N, lbs/day	5313	2842	Weekly	24-hour Composite
Temperature, °C	Report Instant. Max ²	---	Continuous	Recording

Table 1 - Outfall 001 Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations		Monitoring Requirements	
	Maximum Daily	Average Monthly	Sample Frequency	Sample Type
Oil and Grease, mg/L	15	---	Weekly	24-hour Composite ³
Total aqueous hydrocarbons (TAqH), µg/L	---	---	Quarterly ⁴	24-hour Composite
Total aromatic hydrocarbons (TAH), µg/L	---	---	Quarterly ⁴	24-hour Composite
Chronic Toxicity, TU _c	---	---	Quarterly	24-hour Composite
Production, Air Dried Tons per Day	---	---	Daily ⁵	---

Footnotes:

- 1 Reporting is required within 24 hours of a maximum daily limit violation. See Part III.G.
- 2 Monitoring and reporting of effluent temperature is required 120 days from the effective date of the permit.
- 3 Method 1664 may be used.
- 4 Quarterly monitoring is required during years 1, 2 and 3 of the permit.
- 5 The maximum daily production values for urea and ammonia for the previous year shall be submitted with the January Discharge Monitoring Report of the following year.

4. For purposes of monthly reporting on the Discharge Monitoring Report (DMR), if a value is less than the method detection level, the permittee shall report “less than {numerical method detection level}” on the DMR. For purposes of calculating monthly or annual averages, zero may be used for values less than the method detection level.
5. The discharge of biocides is prohibited, except as allowed by provisions a. through d. below. All calculations and marine toxicity data shall be based on the whole product and submitted (via certified mail) to EPA and ADEC **30 days prior to the proposed use**. If EPA or ADEC determines that the biocide(s) cannot be discharged without violating state water quality standards, the permittee will be notified as such within 30 days.

- a. If no more than one biocide is used, the maximum estimated concentration in the discharge divided by the acute dilution factor at the edge of the mixing zone will not exceed 0.01 times that lowest 96-hour LC₅₀ for at least two sensitive marine species;
- b. If two biocides are used, the sum of the maximum estimated concentrations at the edge of the mixing zones multiplied by four and divided by the acute dilution factor must not exceed 0.01 times the sum of the lowest 96-hour LC₅₀'s for at least two sensitive marine species;
- c. The additional biocide(s) shall show minimal toxicity for two sensitive species; and
- d. The discharged concentrations of each chemical component in the product, when divided by the acute dilution factor at the edge of the mixing zone, does not exceed applicable EPA Quality Criteria for Water or EPA water quality advisories, including that for tributyltin.

B. Whole Effluent Toxicity Testing Requirements

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

1. Test Species and Methods. The permittee shall conduct the larval development and fertilization tests using the more sensitive available invertebrate species below:

Mytilus spp. (Mussel) or *Crassostrea gigas* (oyster) - larval development test; and

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

2. Toxicity Trigger. For the purposes of this permit, the chronic toxicity trigger is defined as toxicity greater than **224 TU_c**.
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.

A series of five dilutions and a control shall be tested. The series shall include the dilution associated with the chronic toxicity trigger (4%), two dilutions above 4%, and two dilutions below 4%.

Test results shall be reported in chronic toxic units (see definitions). In addition to reporting TU_c , the Permittee shall report the NOEC and the EC_{25} of the effluent.

- 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. Each test shall be a static-renewal test, conducted on three 24-hour composite samples of effluent (collected on days one, three, and five). In addition, a split of the first sample collected for each test 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.
- d. Control and dilution water should be synthetic, moderately hard laboratory water, as defined for each test method. 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.
- e. 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 method manual, then the permittee must re-sample and re-test as soon as possible.

4. Accelerated Testing

- a. If chronic toxicity testing requirements are triggered, 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/source of toxicity, effluent variability, treatment system efficiency,
 - 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 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 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 Marine and Estuarine Organisms*, EPA/600/4-87/028, May 1988.
 - c. In addition to toxicity test results, the permittee shall report:
 - i) Dates of sample collection and initiation of each test,
 - ii) Trigger value
 - 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 Monitoring

Five ambient monitoring stations shall be established for the purpose of monitoring total ammonia, pH, temperature, and salinity. These stations shall include a background sampling station (at a point representative of the quality of Cook Inlet, not influenced by the facility's discharge), three sites at the edge of the chronic mixing zone for ammonia¹, and one site within the mixing zone. Ambient monitoring, consistent with the following requirements, shall begin **6 months** (i.e., during the third quarter) after the effective date of this permit and occur for four (4) sampling quarters. Monitoring shall be reported on the monthly DMR following the sampling quarter. The sampling quarter shall be every three months beginning with the month following the effective date of the permit. The ambient monitoring requirements are found in Table 2.

¹The chronic mixing zone for ammonia is described as a vertical cylinder of 221 m radius from the point of discharge extending vertically up to the sea surface and down to the sea bed.

Table 2: Ambient Monitoring Requirements

Effluent Parameter	Location	Sample Frequency ¹	Sample Type
Total Ammonia as N, mg/L	Background, 3 sites at the edge of the mixing zone, & one site w/in the mixing zone	1/quarter ²	Grab
pH, standard units	Background, 3 sites at the edge of the mixing zone, & one site w/in the mixing zone	1/quarter ²	Grab
Temperature, °C	Background, 3 sites at the edge of the mixing zone, & one site w/in the mixing zone	1/quarter ²	Measurement
Salinity, grams per kilogram	Background, 3 sites at the edge of the mixing zone, & one site w/in the mixing zone	1/quarter ²	Grab

Notes:

¹ If poor weather conditions prevent sampling during a quarter, then two samples may be taken the following sampling quarter provided these two samples are spaced at least 4 weeks apart.

² The quarterly monitoring shall be 1/quarter for one year (i.e., four sampling events) and shall occur on the same day as the weekly effluent monitoring in Table 1.

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 completed and implemented within **ninety (90) days** of the effective date of this permit.

1. The QAP shall be designed to assist in planning for the collection and analysis of environmental 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. At a minimum, the QAP shall include the following:
 - a. Details on the number of samples, detailed sampling locations, type of sample containers, preservation of samples, holding times, analytical detection and quantitation limits for each target compound, analytical methods, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
 - b. A map indicating the location of each monitoring point.
 - c. Qualification and training of personnel.
 - d. Specifications for the collection and analysis of quality assurance samples for each sampling event, including matrix spiked and duplicate samples and analysis of field transfer blanks (sample blanks).
 - e. 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 ADEC upon request.

II. BEST MANAGEMENT PRACTICES AND POLLUTION PREVENTION PLAN

The permittee shall continue implementing the best management practices (BMP) that were developed to prevent or minimize the generation and the potential for release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities. In addition, the permittee shall establish specific performance objectives for pollution preventing (P2) or reducing pollutants.

A. Best Management Practices

The following BMPs are required in the BMP/P2 plan, to the extent that they have not already been incorporated, no later than **ninety (90) days from the effective date of the permit**.

1. The discharge of spilled waste products through the outfall line is prohibited.
2. The permittee must recover spilled or diverted process chemicals, return such spilled or diverted process chemicals to the process to the maximum extent practicable, or route such material to the wastewater treatment system at a rate that does not disrupt the treatment system.
3. The permittee must ensure that all chemical transfer and process operation areas are adequately constructed to prevent leaks and spills from reaching unpaved areas of the plant.
4. The permittee must establish a program to identify and repair leaking equipment items. This program must include:
 - a. Monthly visual inspections of storage tanks and drums, as well as transfer and process equipment;
 - b. Immediate repair of leaking equipment, when possible. Leaking equipment items that cannot be repaired during normal operations must be identified, a temporary means for mitigating the leaks must be provided, and the leaking equipment items repaired during the next maintenance outage;
 - c. Identification of conditions under which production will be curtailed or halted to repair leaking equipment items or to prevent leaks and spills; and
 - d. A means for tracking repairs over time to identify those equipment items where upgrade or replacement may be warranted based on frequency and severity of leaks, spills, or failures.
5. The six treatment ponds shall be drained, cleaned, and visually inspected once a year to identify and correct any cracks or other means of leakage to groundwater or waters of the U.S. Inspection shall include the concrete floors, embankments, piping connected to the ponds, and the suction screen structures. The results of such inspection shall be reported on the February Discharge Monitoring Report beginning February 2002.
6. The BMP/P2 plan and any amendments must be reviewed by the senior technical manager and approved and signed by the manager. Any person signing the plan or its amendments must certify to EPA, under penalty of law,

that the plan and its amendments have been prepared in accordance with good engineering practices and in accordance with 40 CFR 430.03. The permittee is not required to obtain approval from EPA of the BMP/P2 plan or any amendments.

7. The permittee must conduct initial and refresher training of operators, maintenance personnel, and other technical and supervisory personnel who have responsibility for operating, maintaining, or supervising the operation and maintenance of equipment items. The refresher training must be conducted at least annually and the training program must be documented.
8. The permittee must prepare a brief report that evaluates each toxic substance spill that is not contained at the immediate area and any intentional diversion of toxic substances not contained at the immediate area. The report must describe the following:
 - a. the equipment items involved,
 - b. the circumstances leading to the incident,
 - c. the effectiveness of the corrective actions taken to contain and recover the spill or intentional diversion,
 - d. plans to develop changes to equipment and operating and maintenance practices as necessary to prevent recurrence.

Discussion of the reports must be included as part of the annual refresher training, and
 - e. The permittee must install and maintain impermeable secondary containment for storage tanks and drums equivalent to the volume of the largest tank plus sufficient freeboard for precipitation.
9. The BMP/P2 Plan shall be consistent with EPA's *Guidance Manual for Developing Best Management Practices (BMP)*, EPA 833-B-93-004.

B. BMP Requirement for Sludge Handling

The Permittee must submit plans for ADEC review and written approval for sludge handling and disposal, in accordance with 18 AAC 72.600(c)(5), no later than **90 days from the effective date of the permit**

C. Pollution Prevention Framework

The Permittee shall submit a framework document to ADEC for incorporating pollution prevention into Alaska Nitrogen facility activities that discharge (or have the potential to discharge) into waters of state no later than **one year from the effective date of the permit**. ADEC shall have the right to disapprove the P2 Framework within 60 days of receipt by ADEC, after which time such changes shall be deemed approved if ADEC does not disapprove them. The framework document which shall be incorporated into the BMP/P2 plan shall include:

1. A written policy of management support and commitment for planning and implementation of pollution prevention goals developed during the planning process,
2. The methodology for considering the technical and economical feasibility of a proposed pollution prevention option,
3. A statement of specific and measurable pollution prevention objectives, goals, and priorities for Alaska Nitrogen Products. Standards of measure may be quantitative or qualitative depending on the type or objective, priority, or goal,
4. Identification of any significant toxic and/or hazardous products and waste streams; the processes which use these products or generate these waste streams; and opportunities for eliminating or reducing the use of these products and the generation of these waste streams,
5. Evaluation and prioritization of pollution prevention and reduction opportunities, and
6. Establishment of a schedule for implementing technically and economically feasible pollution prevention opportunities.

D. Amendment of BMP/P2 Plan

1. The permittee must amend the BMP/P2 plan whenever a hazardous materials incident occurs.
2. The permittee must amend its BMP/P2 plan whenever there is a change in the design, construction, operation, or maintenance of the facility that materially affects the potential for leaks or spills of toxic substances.
3. The permittee must amend its BMP/P2 plan whenever it is found to be ineffective at preventing or minimizing the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities.

E. Annual Pollution Prevention Reports

The Permittee shall prepare annual P2 reports on the status of efforts to meet stated P2 objectives, goals, and priorities, and submit the report to ADEC. The first progress report shall be due **two years from the effective date of the permit**. Subsequent reports shall be due **annually** on the anniversary of the effective date. The P2 reports shall:

1. Identify progress towards meeting P2 objectives, goals, and priorities. Problems encountered and/or highlights of efforts to prevent pollution shall also be identified.
2. Describe P2 projects implemented and for each project, to the extent possible (considering technical and economic feasibility) identify:
 - i. The type and quantity of toxic and/or hazardous products reduced or eliminated and;
 - ii. The type and quantity of waste streams reduced or eliminated

F. Documentation and Annual Review

1. The permittee shall maintain on its premises a complete copy of the current BMP/P2 plan, and records and must make the plan and records available to the Regional Administrator or ADEC for review upon request.
2. The permittee shall maintain the following records for three years from the date they are created:
 - a. Records tracking the repairs performed in accordance with the repair program described in paragraph A.4 of this Part;
 - b. Records of initial and refresher training conducted in accordance with paragraph A.7 of this Part;

- c. Reports prepared in accordance with paragraph A.8 of this Part and
 - d. Records of monitoring required by paragraph A.5 of this Part.
3. The plant engineering staff and the plant manager shall review and endorse the BMP/P2 plan at least annually. The endorsement of the plan shall be via a certified statement, by the plant manager, that the above review has been completed and that the BMP/P2 plan fulfills the requirements set forth in this permit. The endorsement shall also identify the type and quantity of toxic and/or hazardous products reduced or eliminated and the type and quality of wastestreams reduced or eliminated. The certified statement shall be submitted to EPA with the **January DMR** for each year the facility is operating.

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling (Routine and Non-Routine Discharges).** Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C ("Monitoring Procedures"). The permittee must 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 DMR form. The permittee shall submit reports monthly, postmarked by the **10th 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 Cook Inlet tribes at the following addresses:

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-133
Seattle, Washington 98101
fax (206)553-1280

Alaska Department of Environmental Conservation
Attn: Division of Air and Water Quality
555 Cordova Street
Anchorage, Alaska 99501

Native Village of Salamatof
ATTN.: Kellie Kvasnikoff for Cook Inlet Tribes
P. O. Box 2682
Kenai, AK 99611
fax (907) 283-6470

- 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.** Records of monitoring information must include:
1. the date, exact place, and time of sampling or measurements;
 2. the name(s) of the individual(s) who performed the sampling or measurements;
 3. the date(s) analyses were performed;
 4. the names of the individual(s) who performed the analyses;
 5. the analytical techniques or methods used; and
 6. the results of such analyses.

Compliance with the biocide provisions in Part I.A.5 shall include keeping records for the produce, dates of use, quantity used, maximum estimated concentration in the discharge on those dates, and any other relevant information

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;
 - d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
 - 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 µg/l);
 - b. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/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 µg/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.** Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$27,500 per day for each violation).

2. **Administrative Penalties.** Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$27,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$137,500).

3. **Criminal Penalties:**
 - a. **Negligent Violations.** The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

 - b. **Knowing Violations.** Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.

- c. **Knowing Endangerment.** Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
 - d. **False Statements.** The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- C. Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.
- D. Duty to Mitigate.** The permittee 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, except as specifically authorized in Part I.A.

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”).

The permittee shall give notice to the Director and ADEC as soon as possible of any planned changes in process or chemical use whenever such change could significantly change the nature or increase the quantity of pollutants discharged.

K. Anticipated Noncompliance. The permittee shall also 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 as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

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

G. Inspection and Entry. The permittee 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. 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.

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

VI. DEFINITIONS

4. "Administrator" means the Administrator of the EPA, or an authorized representative.
5. "Annual average" means the arithmetic average of all samples collected in any 12 consecutive months. For purposes of averaging, non-detected values shall be used at one-half of the detection value.
6. "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.
7. "Best Management Practices (BMP) plan" means the plan that was submitted to EPA in August 1997, amended December 1997, and any future amendments.
8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
9. "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.
10. "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.
11. "Daily maximum". See Maximum daily limitation.
12. "Director" means the Director of the Office of Water, EPA, or an authorized representative.
13. "DMR" means discharge monitoring report.
14. "25% Effect Concentration (EC25)" is a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., survival or fertilization) in 25% percent of the test organisms, calculated from a continuous model (e.g., US EPA Probit Model).

15. "EPA" means the United States Environmental Protection Agency.
14. "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.
15. "Grab" sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
16. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
17. "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 (40 CFR 136).
18. "Minimum Level (ML)" means the concentration at which the entire analytical system gives recognizable signals and an acceptable calibration point.
19. "Monthly average" means the 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.
16. "No Observed Effect Concentration (NOEC)" is the highest tested concentration of effluent to which organisms are exposed in a full life-cycle or partial life-cycle (short-term) test, that causes no observable adverse effect on the test organism at a specific time of observation (i.e., the highest concentration of effluent at which the values for the observed responses are not statistically significant different from the controls).
17. "QA/QC" means quality assurance/quality control.
18. "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. "24-hour 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*.