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

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

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

City of Palmer
Wastewater Treatment Plant

is authorized to discharge from a facility located at **Palmer, Alaska** (latitude: 57E 48: 12"; longitude: 153E 20: 18")

to receiving waters named **Matanuska River**,

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

This permit shall become effective [date]

This permit and the authorization to discharge shall expire at midnight, [date]

Signed this [day] day of [month], [year]

_____

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

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I. EFFLUENT LIMITATIONS

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

B. There shall be no discharge of floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind in concentrations causing nuisance, objectionable, or detrimental conditions or that make the water unfit or unsafe for the use.

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

TABLE I-1. EFFLUENT LIMITATIONS

Parameter	Unit of Measurement	Monthly Average	Weekly Average	Maximum Daily	Minimum Daily
Ammonia (as N)[1]	mg/L	34	---	71	---
	lbs/day	200	---	430	---
BOD_5[2]	mg/L	30	45	60	---
	lbs/day	188	281	375	---
DO	mg/L	---	---	---	2
Fecal Coliform Bacteria[1,3]	FC/100 mL	20[5]	---	40	---
Fecal Coliform Bacteria[1,4]	FC/100 mL	100[5]	---	200	---
Flow	mgd	---	---	0.75	---
pH	s.u.	---	---	8.5	6.5
TSS[6]	mg/L	45	65	---	---
	lbs/day	281	407	---	---
Total Residual Chlorine[1,7]	µg/L	1.7	---	3.4	---
	lbs/day	0.01	---	0.02	---

Footnote:

1 Reporting is required within 24-hours if the maximum daily limit is violated.

2 The average monthly effluent concentration shall not exceed 15 percent of the average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

3 This limitation applies when the permittee uses chlorine to disinfect the effluent.

4 This limitation applies when the permittee uses an alternative disinfection method (e.g., ultraviolet light or ozonation).

5 Based on the geometric mean of all samples taken in that month.

6 The average monthly effluent concentration shall not exceed 35 percent of the average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

7 The effluent limits for chlorine is not quantifiable using EPA approved analytical methods. The permittee will be in compliance with the effluent limits provided the total chlorine residual is at or below the compliance evaluation level of 0.100 mg/L (100 µg/L).

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Monitoring Requirements.

1. Effluent and Influent Monitoring Requirements.

a. Sampling Requirements. During the effective period of this permit, the following monitoring requirements shall apply:

TABLE II-1. EFFLUENT AND INFLUENT MONITORING REQUIREMENTS

Parameter	Units	Sample Location	Sample Frequency	Sample Type
Ammonia, total (as N)	mg/L	effluent	5/month	grab
BOD_5	mg/L	effluent and influent	1/week	24-hour timed composite
DO	mg/L	effluent	1/month	grab
Fecal Coliform	FC/100 mL	effluent	5/month	grab
Flow	mgd	effluent or influent	continuous	recording
pH	s.u.	effluent	5/week	grab
Residue	---	effluent	1/week	visual
Temperature	EC	effluent	5/week	grab
TSS	mg/L	effluent and influent	1/week	24-hour timed composite
Total Residual Chlorine[1]	: g/L	effluent	2/week	grab

Footnote:
1 This monitoring is only required when the permittee uses chlorine to disinfect the effluent.

b. Pretreatment Monitoring Requirements. In August 2000 and January 2001, the following effluent and influent monitroing requirements shall apply:

TABLE II-2. EFFLUENT AND INFLUENT PRETREATMENT MONITORING REQUIREMENTS

Parameter	Units	Sample Frequency	Sample Type
Arsenic, total	µg/L	3/week[1]	24-hour timed composite
Cadmium, total	µg/L	3/week[1]	24-hour timed composite
Chromium, total	µg/L	3/week[1]	24-hour timed composite
Copper, total	µg/L	3/week[1]	24-hour timed composite
Cyanide, total[2]	µg/L	3/week[1]	24-hour timed composite
Lead, total	µg/L	3/week[1]	24-hour timed composite
Mercury, total	µg/L	3/week[1]	24-hour timed composite
Nickel, total	µg/L	3/week[1]	24-hour timed composite
Silver, total	µg/L	3/week[1]	24-hour timed composite
Zinc, total	µg/L	3/week[1]	24-hour timed composite

Footnote:

1 Sampling shall be for one week during the months of August 2000 and January 2001.

2 Eight discrete grab samples shall be collected over a 24-hour day. Each grab sample shall be at least 100 mL. Each sample shall be checked for the presence of chlorine and/or sulfides prior to preserving and compositing (refer to *Standard Methods*, 4500-CN B). If chlorine and/or sulfides are detected, the sample must be treated to remove any trace of these parameters. After testing and treating for the interference compounds, the pH of each sample shall be adjusted, using sodium hydroxide, to 12.0 standard units. Each sample can then be composited into a larger container which has been chilled to 4 degrees Celsium, to allow for one analysis for the day.

c. Sampling Location. Effluent samples shall be collected after the last treatment unit prior to discharge. Influent samples shall take place prior to any treatment system.

d. Influent monitoring is required to be performed within same 24-hour period as effluent monitoring for like parameters.

2. Ambient Monitoring Requirements.

a. Sampling Requirements & Location. During the effective period of this permit, the following ambient monitoring requirements shall apply:

TABLE II-3. AMBIENT MONITORING REQUIREMENTS

Parameter	Units	Sample Frequency	Sample Location	Sample Type
Ammonia, total (as N)	mg/L	1/quarter[1]	upstream & downstream[3]	grab
BOD_5	mg/L	1/quarter[1]	upstream	grab
DO	mg/L	1/quarter[1]	upstream & downstream[3]	grab
Fecal Coliform Bacteria (May 1 - September 31)	FC/100 mL	1/month	upstream & downstream[3]	grab
Fecal Coliform Bacteria (October 1 - April 30)	FC/100 mL	1/quarter[1]	upstream & downstream[3]	grab
Flow	mgd or cfs and ft/sec.	1/quarter[1]	upstream	grab
Hardness (as $CaCO_3$)	mg/L	1/quarter[1]	upstream	grab
pH	s.u.	1/quarter[1]	upstream & downstream[3]	grab
Residue	---	1/quarter[1]	downstream[3]	visual
Temperature	EC	1/quarter[1]	upstream & downstream[3]	grab
Total Residual Chlorine[2]	µg/L	1/quarter[1]	upstream & downstream[3]	grab

Footnote:
1 During the months of February, May, August and November.
2 This monitoring is only required when the permittee uses chlorine to disinfect the effluent.
3 Downstream monitoring shall occur at two locations at the edge of the mixing zone (or as close to the egde of the mixing zone as is practical due to site and access limitations).

b. Ambient monitoring activities shall occur on the same day as effluent monitoring activities, to the extent practicable.

3. Other Monitoring Requirements.

a. Representative Sampling. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

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

c. Test Methods. When conducting monitoring, the permittee shall use the following method detection limits (MDLs), and minimum levels (MLs):

TABLE II-4. ANALYTICAL TESTING REQUIREMENTS

Parameter	Units	MDL	ML
Arsenic, total	µg/L	2.0	
Cadmium, total	µg/L	0.5	
Chromium, total	µg/L	2.0	
Copper, total	µg/L	5.0	
Cyanide, total	µg/L		5.0
Lead, total	µg/L	1.0	
Mercury, total	µg/L	0.2	
Nickel, total	µg/L	5.0	
Silver, total	µg/L	0.2	
Zinc, total	µg/L	5.0	
Total Residual Chlorine	µg/L		100

d. Significan and Categorical Industrial User (SIU and CIU) Monitoring Requirements. Frequency of wastewater sampling for the SIUs and CIUs shall be commensurate with the character and volume of the wastewater, but shall not be less than twice per year. Sample collection and analysis shall be performed in accordance with 40 CFR §403.12(b)(5)(ii) through (v) and 40 CFR Part 136.

B. Recording Requirements.

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

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

   b. The individual(s) who performed the sampling or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

2. Retention of Records.

   a. Monitoring Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time. Data collected on-site, copies of DMRs, and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.

   b. Sludge Records. The permittee is required under 40 CFR §503 to retain records for a period of five years.

   c. Pretreatment Records. The permittee shall retain all records relating to the pretreatment program activities for a minimum of three years and shall make such records available to EPA upon request.

C. Reporting Requirements.

1. Effluent Reporting Requirements.

a. Monitoring results greater than the minimum detection level (MDL) shall be reported as the actual value measured and monitoring results less than the MDL shall be reported as "< [MDL value]".

b. Monitoring results shall be summarized each month on the Discharge Monitoring Report (DMR). The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Quarterly monitoring shall be reported with the DMR in the months of February, May, August and November.

c. Legible copies of the DMR and all other reports shall be signed and certified in accordance with the **Signatory Requirements** (See Section III.B.10) of this permit.

2. Submittal of Monitoring Results and Reports.

a. Monitoring results and reports required under Sections III.A, B and C of this permit shall be submitted to the Director, Office of Water and the State agency at the following addresses:

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

copy to: Alaska Department of Environmental Conservation
Division of Air and Water Quality
555 Cordova Street
Anchorage, Alaska 99503
(907)269-7523
(907)269-7508 fax

b. Reports required under Section III.D of this permit plus copies of all CIU permit applications, permits, reports, enforcement documents, and correspondence concerning any CIUs discharging to the POTW shall be submitted to EPA at the following address:

Pretreatment Coordinator
U.S. Environmental Protection Agency Region 10
1200 Sixth Avenue, OW-130
Seattle, WA 98101

3. Design Criteria Requirement.

   a. The design criteria for the permitted facility are as follows:

TABLE II-5. DESIGN CRITERIA FOR PALMER WWTP		
Criteria	**Value**	**Units**
Average Annual Flow	0.75	mgd
Influent BOD_5 Loading	1056	lbs/day
Influent TSS Loading	1056	lbs/day

   b. Each month, the permittee shall compute an annual average value for flow, and BOD_5 and TSS loading entering the facility based on the previous twelve months data or all data available, whichever is less. These values shall be reported on the monthly DMR in the comments section.

   c. If the facility performs plant upgrades that affect design criteria listed in Table II-4, only data collected after the upgrade should be used in determining the annual average value.

   d. When the average annual values exceed 85% of the design criteria values listed in Table II-4, the permittee shall develop a facility plan and schedule within one year from the date of first exceedance. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits and will be made available to the Director, ADEC, or EPA authorized representative upon request.

4. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

5. Twenty-four Hour Notice of Noncompliance Reporting.

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

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (See **Bypass of Treatment Facilities** in Section III.A.8.);
(2) Any upset which exceeds any effluent limitation in the permit (See **Upset Conditions** in Section III.A.9); or
(3) Violation of a maximum daily discharge limitation for those toxic or hazardous pollutants identified within Table I-1.

b. A written submission shall also be provided to EPA and ADEC within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

(1) A description of the noncompliance and its cause;
(2) The period of noncompliance, including exact dates and times;
(3) The estimated time noncompliance is expected to continue if it has not been corrected; and
(4) Steps taken or planned to reduce, eliminate, and prevent re-occurrence of the noncompliance.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.

d. Reports shall be submitted to the addresses in **Submittal of Monitoring Results and Reports** (See Section II.C.2).

6. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported in the monthly monitoring reports. The reports shall contain the information listed in Paragraph II.C.5.b.

III. SPECIAL CONDITIONS

A. Sludge Management Requirements. The permittee shall ensure that an updated biosolids permit application (Form 2S) is on file with the EPA.

B. Quality Assurance Requirements.

1. The permittee is required to develop and submit a Quality Assurance Project Plan (QAPP) by January 1, 2001. The QAPP may be incorporated as part of the facilities O&M manual.

note: The document *Guidance for Preparation of Quality Assurance Project Plans*, EPA, Region 10, Quality and Data Management Program, QA/G-5, can be used as a helpful reference guide in preparing the QAPP. This document is available as an Adobe Acrobat file at:

http:\\www.epa.gov\r10earth\offices\oea\qaindex.htm.

2. At a minimum, the following information shall be provided in the QAPP:

a. Sample location and frequency;

b. Sample handling procedures;

c. Parameters, test methods, and detection limits;

d. Number of QC samples, spikes and replicates required for analysis (for precision accuracy);

e. Documentation requirements for the laboratory (i.e., retention time, QA/QC procedures for test methods, etc.);

d. Organizational responsibilities - who is responsible for QA/QC activities (i.e., who takes samples, who reviews the data analysis, etc.); and

e. Name(s), address(es), and phone number(s) of laboratories used or proposed to be used by the permittee.

3. The permittee is responsible for reviewing and updating the QAPP is to ensure all material is still current and applicable.

4. The permittee shall amend the QAPP whenever there is a modification in the sample collection, sample analysis, or conditions or requirements of the QAPP change.

5. Copies of the QAPP shall be kept on site and shall be made available to EPA and ADEC upon request.

C. Operation and Maintenance Plan Review Requirements.

1. By January 1, 2001, the permittee shall review its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs); the plan must be reviewed annually thereafter. BMPs include measures which prevent or minimize the potential for the release of pollutants to the Matanuska River. The O&M Plan shall be retained on site and made available to EPA and ADEC upon request.

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

   a. Spill prevention and control;

   b. Optimization of chemical usage;

   c. Preventive maintenance program;

   d. Minimization of pollutant inputs from industrial users;

   e. Research, develop and implement a public information and education program to control the introduction of household hazardous materials to the sewer system; and

   d. Water conservation.

D. Pretreatment Requirements.

1. The permittee shall update the Sewer Use Ordinance to comply with current federal pretreatment regualtions and guidance. A draft of the revised ordinance shall be submitted to the EPA Region 10 pretreatment coordinator (See II.C.2.b) within four months of the effective date of this permit. A copy of the revised ordinance passed by the City Council shall be submitted to EPA Region 10 for formal approval within eight months of the effective date of this permit.

2. The permittee shall implement the pretreatment provisions of its municipal code and of the General Pretreatment Regulations (40 CFR §403) including any amendments. At a minimum, the permittee shall undertake the following:

   a. Enforce categorical pretreatment standards promulgated pusuant to Section 307(b) and (c) of the CWA and prohibitive discharge standards as set forth in 40 CFR §403.5.

   b. Implement and enforce the requirements of the most recent and effective portions of local law and regulations (e.g., municipal code, sewer use ordinance) addressing the regulation of non-domestic users.

   c. Update the Industrial Waste Survey to ensure proper identification of non-domestic users subject to pretreatment standards. Such a survey shall be submitted to EPA at the address shown in II.C.2.b by December 31, 2000. The permittee shall notify these users of applicable pretreatment standards in accordance with 40 CFR §403.8(f)(1)(iii).

   d. Issue, reissue, and modify, in a timely manner, industrial waqstewater discharge permits to at least all Significant and Categorical Industrial Users (SIUs and CIUs). These documents shall contain, at a minimum, conditions identified in 40 CFR §403.8(f)(1)(iii) and shall require that all reports that are submitted to the City also be submitted to EPA at the address in **Submittal of Monitoring Results and Reports** (See Section II.C.2.b).

e. Provide public access to information considered effluent data under 40 CFR Part 2.

f. Carry out inspections, surveillance, and monitoring of non-domestic users to determine compliance with applicable pretreatment standards and requirements. A thorough inspection of SIUs and CIUs, that includes sampling of SIUs' and CIUs' effluent, shall be conducted at least annually.

g. Require SIUs and CIUs to conduct wastewater sampling as specified in 40 CFR §403.13(e)(1). Frequency of wastewater sampling for the SIUs and CIUs shall be conducted as required in II.A.4.d. If the permittee elects to conduct all the non-domestic user monitoring for any SIU or CIU in lieu of requiring self-monitoring, the permittee shall conduct sampling in accordance with the requirements of II.A.4.d.

h. Enforce and obtain appropriate remedies for any SIUs and CIUs non-compliance with applicable pretreatment standards and requirements. This shall include timely and appropriate reviews of industrial reports to identify all violations of the user's permit, the permittee's local ordinance, and federal pretreatment regulations. Once violations have been uncovered, the permittee shall take timely and appropriate action to address the noncompliance.

i. Conduct a local limits evaluation taking into account water quality in the receiving stream and inhibition levels for biological proceses in the treatment plant. The pollutants addressed shall be, at a minimum, arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, and zinc. The limits and supporting documentation shall be based on the sampling required in Tables II-2 and II-4, and shall be submitted to EPA (See Section II.C.2.b) for review within one year after the effective date of this permit.

3. Whenever, on the basis of information provided to EPA, it is determined that any source contributes pollutants to the permittee's facility in violation of subsection (b), (c), or (d) of Section 307 of the CWA, notification shall be provided to the permittee. Failure by the permittee

to commence an appropriate enforcement action within 30 days of this notification may result in appropriate enforcement action by the EPA against the source and permittee.

4. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:

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

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

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

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

   e. Any pollutant, including oxygen demanding pollutants (e.g., BOD_5) released in a discharge of such volume or strength as to cause interference in the treatment works;

   f. Heat in amounts which inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature at the POTW exceeds 40EC (104EF) unless EPA Region 10, upon request of the POTW, approves alternate temperature limits;

   g. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   h. Wastes which result in the presences of toxic gases, vapros, or fumes within the treatment works in quantities that may cause acute worker health and safety problems; and

i. Any trucked or hauled pollutants, except at discharge points designated by the treatment works.

5. The permittee shall require any industrial user of its treatment works to comply with any applicable requirements of Sections 204(b), 307, and 308 of the CWA, including any requirements established under 40 CFR §403.

E. Signage. The permittee must post signs on the shorline near the outfall and the edge of the mixing zone (approximately 1600 meters downstream of the outfall). The signs should state that treated domestic wastewater is being discharged and provide the name of the facility, the owner of the facility, and a contact name and telephone number to obtain additional information. Additionally, the signs should inform the public that a mixing zone exists, the approximate location and size of the mixing zone, and that certain activities should not take place in the mixing zone.

IV. STANDARD CONDITIONS

A. Compliance Responsibilities.

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

a. 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;

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

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

d. 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.

2. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Penalties for Violations of Permit Conditions.

a. 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).

b. Criminal Penalties.

(1) 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.

(2) 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.

(3) 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 .

(4) 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.

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

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize, or prevent, any discharge, or sludge use or disposal, in

violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed, or used, by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Removed Substances. Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

8. Bypass of Treatment Facilities.

   a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

   b. Notice.

      (1) 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.
      (2) Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under **Twenty-four Hour Notice of Noncompliance Reporting** (See Section II.B.5).

   c. Prohibition of Bypass.

(1) Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:

(a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(c) The permittee submitted notices as required under paragraph 2 of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determined that it will meet the three conditions listed above in paragraph c.(1) of this section.

9. Upset Conditions.

a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Necessary upset demonstration conditions. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;
(2) The permitted facility was at the time being properly operated;
(3) The permittee submitted notice of the upset as required under **Twenty-four Hour Notice of Noncompliance Reporting** (See Section II.B.5); and
(4) The permittee complied with any remedial measures required under **Duty to Mitigate** (See Section III.A.5).

c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

B. General Requirements.

1. Notice of New Introduction of Pollutants.

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

(1) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to sections 301 or 306 of the Act if it were directly discharging those pollutants, and
(2) Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

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

(1) The quality and quantity of effluent to be introduced into such treatment works, and
(2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

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

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

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

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

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

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

3. Requirements for Industrial Users. The permittee shall require any industrial user of these treatment works to comply with any applicable requirements of sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR 403.

4. 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 (e.g., change in disinfection method). Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. Notice is also required when the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, including notification of

additional use or disposal sites not reported during the permit application process.

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

6. 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 re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

8. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

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

10. Signatory Requirements.

    a. All applications, reports, or information submitted to the Director shall be signed and certified.

    b. All permit applications shall be signed by either a principal executive officer or ranking elected official.

c. All reports required by the permit and other information requested by the Director 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:

(1) The authorization is made in writing by a person described above and submitted to the Director, and
(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

d. Changes to authorization. If an authorization under **Signatory Requirements** (See Section III.B.10) 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 Section III.B.10 must be submitted to the Director prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

e. Certification. Any person signing a document under this section shall make the following certification:

"*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*"

11. Availability or Reports. Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

12. 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.

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

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

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

    a. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;

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

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

16. 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.

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

V. DEFINITIONS

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

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

"Categorical Industrial User (CIU)" is a discharger to a POTW which carries out specific categories of industrial activity identified in 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

"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.

"Geometric mean" means the "n"th root of the product of "n" samples collected during the month, where n refers to the number of samples collected in the month.

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

"Maximum daily discharge limitation" means the highest allowable "daily discharge".

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

"Minimum level (ML)" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes and processing steps have been followed.

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

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

A "Significant Industial User (SIU)" means a categorial industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater), contributes a process wastestream that make up 5 percent or more of the average dry weather hydaulic or organic capacity of the POTW, or is designated as such by the Control Authority (the City of Palmer) as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement. The Control Authority has the option to determine an industrial user meeting the above criteria as a non-significant industrial user if the industrial user's discharge does not have reasonable potential to adversley affect the POTW's operation or violate any pretreatment standard or requirement.

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

"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.

VI. ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
BMPs	Best management practices
BOD_5	Biochemical oxygen demand, five-day
EC	Degrees Celsius
CFR	Code of Federal Regulations
CIU	Categorical Industrial User
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EPA	U.S. Environmental Protection Agency
lbs/day	Pounds per day
mg/L	Milligrams per liter
µg/L	Micrograms per liter
mgd	Million gallons per day
N	Nitrogen
NPDES	National Pollutant Discharge Elimination System
OW	Office of Water
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAPP	Quality assurance project plan
SIU	Significant Industrial User
TSD	Technical Support document (EPA, 1991)
TSS	Total suspended solids
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WWTP	Wastewater treatment plant

APPENDIX A

SUMMARY TABLES

TABLE A-1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS								
Parameter	**Units**	**Monthly Average**	**Weekly Average**	**Maximum Daily**	**Minimum Daily**	**Sample Location**	**Sample Frequency**	**Sample Type**
Ammonia (as N)[1]	mg/L	34	---	71	---	effluent	5/month	grab
	lbs/day	200	---	430	---			
BOD_5[2]	mg/L	30	45	60	---	effluent & influent	1/week	24-hour timed composite
	lbs/day	188	281	375	---			
DO	mg/L	---	---	---	2	effluent	1/month	grab
Fecal Coliform Bacteria[1,3]	FC/100 mL	20[5]	---	40	---	effluent	5/month	grab
Fecal Coliform Bacteria[1,4]	FC/100 mL	100[5]	---	200	---			
Flow	mgd	---	---	0.75	---	effluent or influent	continuous	recording
pH	s.u.	---	---	8.5	6.5	effluent	5/week	grab
Residue	---	---	---	---	---	effluent	1/week	visual
TSS[6]	mg/L	45	65	---	---	effluent & influent	1/week	24-hour timed composite
	lbs/day	281	407	---	---			
Total Residual Chlorine[1,7]	µg/L	1.7	---	3.4	---	effluent[8]	2/week	grab
	lbs/day	0.01	---	0.02	---			

Footnote:

1 Reporting is required within 24-hours if the maximum daily limit is violated.

2 The average monthly effluent concentration shall not exceed 15 percent of the average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

3 This limitation applies when the permittee uses chlorine to disinfect the effluent.

4 This limitation applies when the permittee uses an alternative disinfection method (e.g., ultraviolet light or ozonation).

5 Based on the geometric mean of all samples taken in that month.

6 The average monthly effluent concentration shall not exceed 15 percent of the average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

7 The effluent limits for chlorine is not quantifiable using EPA approved analytical methods. The permittee will be in compliance with the effluent limits provided the total chlorine residual is at or below the compliance evaluation level of 0.100 mg/L (100 µg/L).

8 This monitoring is only required when the permittee uses chlorine to disinfect the effluent.

TABLE A-2. REPORTS SCHEDULE	
Report	**Due Date**
Monthly Discharge Monitoring Reports	10th of following month
Pretreatment Monitoring	September 10, 2000 and February 10, 2001
QAPP	January 1, 2001
BMPP	January 1, 2001
Draft Sewer Use Ordinance	within four months of permit issuance
Final Sewer Use Ordinance	within eight months of permit issuance
Industrial User Survey	December 31, 2000