NPDES Permit No.: AK-004335-4

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" or "CWA"),

**ARCO Alaska, Inc.**
700 G Street
P.O. Box 100360
Anchorage, Alaska 99510-0360

is authorized to discharge from

**Kuparuk waterflood operations** (the "facility"),
a facility classified as SIC No. 1311 and
located on the North Slope, Alaska,

to

**Simpson Lagoon** of the Beaufort Sea (the "receiving waters"),
at Latitude 70°30'45" N, Longitude 149°51'30" W, and
in USGS Hydrologic Unit No. 19060401,

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

The permit shall become effective April 24, 2000.

The permit and the authorization to discharge shall expire at midnight, January 24, 2005.

**The permittee shall reapply for a permit reissuance on or before** November 24, 2004
180 days before the expiration of this permit, if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 22nd day of March, 2000.

/s/Randall F. Smith
Randall F. Smith
Director
Office of Water

## TABLE OF CONTENTS

## I. EFFLUENT LIMITS AND MONITORING

During the term of the permit, the permittee is authorized to discharge wastewater from the facility through outfalls 001 and 002 in accordance with the following conditions.

### A. Summary Table

**Table 1. Limits and Monitoring for Discharges 001 and 002**

| Parameter | Average Monthly Limit | Maximum Daily Limit | Sampling Method and Frequency | Reported Values |
|---|---|---|---|---|
| **Combined wastewater**, Discharge 001 | | | | |
| Flow, 001 | no limit | 2.2 MGD | Calculation or meter; daily | Average monthly and maximum daily, MGD |
| TRC in open-water conditions, 001 | 212 Fg/L | 426 Fg/L | Calculation or grab, daily * | Average monthly and maximum daily, Fg/L |
| TRC in under-ice conditions, 001 | 62 Fg/L | 125 Fg/L | Calculation or grab, daily * | Average monthly and maximum daily, Fg/L |
| pH, 001 | no limit | no limit | Grab or meter, weekly | Minimum and maximum monthly values, pH units |
| Temperature, 001 | no limit | no limit | Recording or meter, daily | Average monthly and maximum daily, EC |
| **Marine life return system**, Discharge 002 ** | | | | |
| Flow, 002 | no limit | no limit | Calculation or meter, weekly | Average monthly and maximum daily, MGD |
| Temperature, 002 | no limit | no limit | Recording or meter, 3/week or more | Mean weekly effluent minus mean weekly influent, EC |

Note: * Daily grab samples are required during chlorination; calculation of zero discharge of TRC may be used on days without chlorination.
**Monitoring and reporting are required during periods of surface discharge only.

1. Monitoring procedures. Monitoring shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been approved by EPA.

   Samples taken in compliance with the effluent monitoring requirements of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

   The permittee shall ensure that all effluent monitoring is conducted in compliance with good quality assurance and control procedures and the requirements of the permit.

2. Additional monitoring by the permittee. If the permittee monitors any pollutant discharge more frequently than the permit requires using test procedures approved under 40 CFR 136 or as specified in the permit, the permittee shall include the results of this monitoring in the calculation and reporting of the data submitted in the discharge monitoring report.

3. Report of monitoring results. An annual discharge monitoring report (DMR) of the results of effluent monitoring shall be submitted to EPA on or before January 15th of the calendar year following the monitoring. The annual report shall include tabular presentations of the date, and time of monitoring, and the measurements of flow and effluent parameters. The annual report shall also include a table reporting any non-compliant discharges, describing the date and time, effluent characteristics, and cause and resolution of the discharge. (The permittee has a separate and independent responsibility to promptly report a non-compliant discharge as provided in this permit.)

4. Modification of monitoring program. The monitoring program may be modified if EPA determines that it is appropriate. In addition, modification may be requested by the permittee. The modified program may include changes in survey (1) frequencies, (2) parameters, or (3) methods.

**B. Strainer/Filter Backwash (Discharge 001)**

1. Organic biocides such as glutaraldehyde or glutaraldehyde/quaternary amine blend may be used to control sulfate-reducing bacteria. In situations involving a surface discharge of backwash effluent that may contain such constituents (i.e., an application upstream rather than downstream of the filters), the total quantity of organic biocides shall not exceed 50 gal. per treatment and no backwash discharge shall be made until forward flow has been resumed and an additional 3,000 bbl of uncontaminated seawater have passed through the treated filter. The use of other organic biocides must be approved by EPA and ADEC prior to discharge.

2. Nalco 7607, Nalco 7768, Nalco 3332, Chemlink 4835, and other EPA-approved clarifying agents are authorized for use and discharge at the facility. Coagulants and flocculents as groups of additives are limited to applications of no more than 1 ppm each at the facility.

   The discharge of other (spent) water clarifying agents and their residual monomers may be authorized by EPA and ADEC subject to the following conditions.

   a. This authorization of the discharge of coagulants at concentrations which meet the Alaska Water Quality Standard for toxic and other deleterious substances will be granted only if the water clarifying agent is not carcinogenic or mutagenic and will not bioaccumulate.

   b. Synthetic water clarifying agents shall be limited further to maximum application doses as follows:

      (1) synthetic cationic coagulants shall not be used individually or in combination in concentrations exceeding 1 ppm at any time of the year;

      (2) synthetic anionic flocculents shall not be used individually or in combination in concentrations exceeding 1 ppm at any time of the year; and

      (3) synthetic water clarifying agents shall contain no more than 0.05% residual monomeric contaminants.

   c. The permittee shall provide information to EPA and ADEC on (1) the toxic, mutagenic, carcinogenic and bioaccumulation characteristics and (2) the optimal coagulating application doses of the proposed water clarifying agents. The information and test results required below shall be submitted to EPA and ADEC at least 30 days prior to the date requested for utilization of water clarifying agents.

      (1) The trade name(s) and chemical family of each proposed water clarifying agent and the chemical name and Chemical Abstracts Service (CAS) registration number of its primary component monomers;

      (2) the information on each water clarifying agent and its primary component monomers which is contained in the available computerized chemical databases of EPA (e.g., AQUIRE and IRIS), the National Library of Medicine (e.g., TOXNET-HSDB, RTECS, and CCRIS) and Chemical Information Systems, Inc. (e.g., CIS-GENETOX).

d. The permittee shall provide the results of tests to measure the acute toxicity to marine life of each water clarifying agent proposed for use and discharge at the facility to EPA and ADEC.

(1) Lethal concentrations ($LC_{50}$) shall be determined using the following marine bioassays:

- Mysid bioassay (conducted on Mysidopsis bahia) according to the protocol of EPA (1991) in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, EPA/600/4-90/027, September 1991.

- Bivalve larvae bioassay (conducted on either the blue mussel, Mytilus edulis, or the Pacific oyster, Crassostrea gigas) according to the protocol of ASTM (1989) in "Standard practice for conducting static acute toxicity tests with the larvae of four species of bivalve molluscs," ASTM designation E-724-80.

All quality assurance criteria and statistical analyses used shall be in accordance with Quality Assurance Guidelines for Biological Testing (U.S. EPA 1978), Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (USEPA 1991), and the individual protocols.

e. The permittee shall conduct an analysis of the range of optimum application doses of proposed water clarifying agents and provide the information to EPA and ADEC. Influent TSS samples across a range of 5 ppm to 500 ppm shall be utilized to determine optimum application rates for varying conditions.

f. Compliance with the limitation on the authorized application dose shall be measured by the permittee maintaining records of the daily use of water clarifying agents (recorded for each type of water clarifying agent used) and daily volumes of water treated. This information shall be retained on site. The following information shall be submitted to EPA and ADEC in an annual report: (1) total amount of each water clarifying agent used during a month and (2) total volume of seawater treated in the filters during a month.

## C. Other Effluent Conditions

1. State Water Quality Standards. The permittee shall not discharge any pollutant other than those listed in its application in concentrations which exceed applicable State water quality criteria at the end of the discharge pipe.

2. Toxic Compounds and Materials. There shall be no discharge of diesel oil, halogenated phenolic compounds, trisodium nitrilotriacetic acid, sodium chromate or sodium dichromate.

3. Floating Solids, Visible Foam or Oily Wastes. There shall be no discharge of floating solids or visible foam in other than trace amounts. Additionally, discharges shall not cause a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines.

4. Surfactants, Dispersants, and Detergents. The discharge of surfactants, dispersants and detergents shall be minimized

5. Mixing zone for Outfall 001. The mixing zone for discharges from Outfall 001 is defined as follows:

   a. Horizontal extent determined by 100 meter radius from Outfall 001 (i.e. cylindrical surface).
   b. Extends vertically up to, but not including, the sea surface.
   c. Extends vertically down to, and including, the seabed.

   Within this mixing zone, the following Alaska water quality criteria may be exceeded: pH, Turbidity, Temperature, Sediment, Total Residual Chlorine, Residues, Color and Whole Effluent Toxicity.

   The antidegradation policy of the Alaska Water Quality Standards allows for the reduction of water quality for the designated pollutants within these authorized mixing zones.

## II. BEST MANAGEMENT PRACTICES PLAN

Through implementation of the BMP Plan, the permittee shall ensure that methods of pollution prevention, control and treatment will be applied to all wastes and other substances discharged. The permittee shall update and continue its implementation of a Best Management Practices (BMP) Plan in accordance with the following purpose and objectives.

**A. Purpose and Objectives.** The permittee shall prevent or minimize the generation and discharge of wastes and pollutants from the facility to the waters of the United States through implementation of a BMP Plan. Pollution should be prevented or reduced at the source or recycled in an environmentally safe manner whenever feasible. Disposal of wastes into the environment should be conducted in such a way as to have a minimal environmental impact.

The permittee shall develop its BMP Plan consistent with these objectives.

1. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility shall be minimized by the permittee to the extent feasible by managing each influent waste stream in the most appropriate manner.

2. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the Plan, the permittee shall ensure proper operation and maintenance of the treatment facility.

3. The BMPs and SOPs shall minimize discharges resulting from operations and waste disposal at the strainers, filters and deaerators.

**B. Documentation.**

1. The BMP Plan will be developed in accordance with good engineering practices and will be documented as a written plan and include necessary plot plans, drawings, or maps. The BMP Plan will be organized and written with the following structure:

   a. Name and location of the facility;

   b. Statement of BMP policy;

   c. Identification and assessment of potential effects of the pollutant discharges;

   d. Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to,

      (1) the modification of equipment, facilities, technology, processes, and procedures, and

      (2) the improvement in management, inventory control, materials handling, or general operational phases of the facility;

   e. Good housekeeping;

   f. Preventative maintenance;

   g. Inspections and records; and

   h. Employee training.

2. The BMP Plan will include the following provisions concerning its review:

   a. Provide for a review by the facility manager and appropriate staff; and

   b. Include a statement that the above review has been completed and that the BMP Plan fulfills the requirements set forth in the permit. This statement shall be certified by the dated signature of the facility manager.

3. The BMP plan shall be consistent with the general guidance contained in the publication entitled Guidance Manual for Developing Best Management Practices (USEPA 1993) or it subsequent revisions.

4. The permittee shall maintain a copy of its BMP Plan at its facility and shall make the plan available to EPA and ADEC for review and approval upon request.

**C. Modification of the BMP Plan.**

1. The permittee shall amend the BMP Plan whenever there is a change in the facility, its operations, or other circumstances which materially increase the generation of pollutants and their release or potential release to the receiving waters. The permittee shall also amend the BMP Plan when facility operations covered by the BMP Plan change. Any such changes to the BMP Plan will be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reviewed and approved by the facility manager or his designee.

2. If a BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan will be subject to modification to incorporate revised BMP requirements.

## III. COMPLIANCE REQUIREMENTS

**A. Duty to Comply**. The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**B. 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 the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

**C. Duty to Mitigate**. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit which has a reasonable likelihood of adversely affecting human health or the environment.

**D. Toxic Pollutants**. The permittee shall comply with effluent standards or prohibitions established for toxic pollutants under Section 307(a) of the Act within the time provided in the regulations that establish those standards or prohibitions.

**E. Removed Substances**. Solids, sludge, filter residues, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a

manner such as to prevent any pollutant from such materials from entering navigable waters.

**F. Need to Halt or Reduce Activity not a Defense**. It will 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 the permit.

**G. Bypass of Wastewater Treatment**.

1. Bypass exceeding effluent limitations. Bypass of wastewater treatment is prohibited if such bypass will produce a discharge which exceeds the effluent limitations of the permit. EPA or ADEC 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 judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

   c. The permittee submitted notices of the bypass as follows.

      (1) Notice of an 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) Notice of an unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under "Reporting of Noncompliance (see below).

   EPA and ADEC may approve an anticipated bypass, after considering its adverse effects, if EPA and ADEC determine that it will meet the three conditions listed below.

2. Bypass not exceeding effluent 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.

**H. Upset Conditions**.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met. No

determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset will 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 "Reporting of Noncompliance" (see below); and

   d. The permittee complied with any remedial measures required under "Duty to Mitigate" (see below).

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

**I. Inspection and Entry**. The permittee shall allow EPA, 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 the permit;

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

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

**J. Penalties for Violations of Permit Conditions**.

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

Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note).

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

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

4. Knowing endangerment. Any person who knowingly violates a permit condition implementing CWA §§ 301, 302, 306, 307, 308, 318, or 405, 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.

5. False statements. Section 309(c)(4) of the Act provides that any person who knowingly makes any false material statement, representation, or certification in any application or notice of intent, 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 be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in explicit variances allowed within this permit (see "Bypass of Treatment Facilities" and"Upset Conditions"), nothing in this permit shall be construed to relieve a permittee of the civil or criminal penalties for noncompliance.

## IV. RECORDING AND REPORTING REQUIREMENTS

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

**B. Records Contents**. Records of monitoring information shall include at least the following information:

1. The name(s) of the individual(s) who performed the sampling or measurements;

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

3. The name(s) of the individual(s) who performed the analyses;

4. The date(s) analyses were performed;

5. The analytical techniques or methods used; and

6. The results of such analyses.

**C. Submittal of Reports**. An annual report of effluent monitoring and other information required by the permit will be submitted to EPA and ADEC at the following addresses:

original to:

U.S. Environmental Protection Agency, Region 10
NPDES Compliance Unit (OW-133)
1200 Sixth Avenue
Seattle, Washington 98101

copy to:

Alaska Department of Environmental Conservation
attention: Air and Water Quality Division
PO Box 1709
Valdez, Alaska, 99686.

**D. Retention of Records and Reports**. The permittee shall retain copies 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 the permit, and records of all data used to complete the application for the permit, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of EPA at any time.

**E. On-site Availability of Records and Reports**. Copies of this NDPES permit, monitoring reports, and other technical documents required under the permit shall be maintained on-site during the duration of activity at the permitted location.

**F. Availability of Reports for Public Review**. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of the permit will be available for public review at the offices of EPA and ADEC. As required by the Act, permit applications, permits, and effluent data will not be considered confidential.

**G. Planned Changes**. The permittee shall give sixty (60) days advance notice to EPA and ADEC as soon as possible of any planned physical alterations of or additions to the permitted facility. Notice is required only when:

1. The alteration of or addition to the facility could result in noncompliance with the explicit effluent limitations of the permit;

2. The alteration of or addition to the facility could significantly change the nature or increase the quantity of pollutants discharged which are not limited explicitly in the permit; or

3. The alteration of or addition to the facility may meet one of the criteria for determining whether the facility is a new source as determined in 40 CFR § 122.29(b).

**H. Notice of New Introduction of Pollutants**.

1. The permittee shall provide sixty (60) days advance notice to EPA and ADEC of:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

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

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

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

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

**J. Reporting of Noncompliance**.

1. The following occurrences of noncompliance shall be reported by telephone to EPA (206-553-1846) and ADEC (907-269-7500) within 24 hours from the time the permittee becomes aware of the circumstances:

   a. Any noncompliance which may endanger human health or the environment;

   b. Any violation of a maximum daily discharge limitation for any of the pollutants listed in the permit (see "Effluent Limitations" above);

c. Any unanticipated bypass which exceeds any effluent limitation in the permit (see "Bypass of Treatment Facilities" above); or

d. Any upset which exceeds any effluent limitation in the permit (see "Upset Conditions" above).

2. A written notice of the preceding occurrences of noncompliance will also be provided to EPA and ADEC (see "Submittal of Reports" above) within five (5) days of the time that the permittee becomes aware of the circumstances which lead to the noncompliance.

3. Instances of noncompliance not required to be reported within 24 hours will be reported at the time that the next discharge monitoring report is submitted.

The written submission will contain:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times;

c. The estimated time noncompliance is expected to continue if it has not been corrected; and

d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

## V. GENERAL PROVISIONS

**A. Permit Changes and Other Actions**. The permit may be modified, revoked, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation, and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

**B. Duty to Reapply at least 180 days before Expiration Date**. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the 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 the permit in order to ensure the timely reissuance of the permit.

**C. Incorrect Information and Omissions**. 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 EPA or ADEC, it will promptly submit such facts or information.

**D. Signatory Requirements**. All applications, reports or information submitted to EPA and ADEC will be signed and certified.

1. All permit applications will 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 EPA or ADEC will 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 EPA and ADEC, and

   b. The authorization specified 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. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under "Signatory Requirements" 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 this section shall be submitted to EPA 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 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."

**E.** **Property Rights**. The issuance of the 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.

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

**G.** **Transfers**. The permit may be automatically transferred to a new permittee if:

1. The current permittee notifies EPA 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. EPA does not notify the existing permittee and the proposed new permittee of its 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 the preceding paragraph.

**H.** **Oil and Hazardous Substance Liability**. Nothing in the 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.** **State Laws**. Nothing in the permit will 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.

**J.** **Reopening of the Permit.** If these permit requirements are insufficient to achieve Alaska State Water Quality Standards, EPA, in consultation with ADEC, may reopen and modify the permit in accordance with 40 CFR § 122.44(d)(1)(C)(4) and 40 CFR § 122.62 to include more stringent effluent limitations and/or additional monitoring requirements.

## VI. DEFINITIONS and ACRONYMS

§ means section or subsection.

*AAC* means the Alaska Administrative Code.

*ADEC* means Alaska Department of Environmental Conservation.

*Average monthly discharge* means the average of *daily discharges* over a monitoring month, calculated as the sum of all *daily discharges* measured during a monitoring month divided by the number of *daily discharges* measured during that month. It may also be referred to as the "monthly average discharge."

*Best management practices* ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or **waste** disposal, or drainage from raw material storage.

*BOD5* means five-day biochemical oxygen demand.

*Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

E*C* means degrees centigrade.

*CFR* means the Code of Federal Regulations.

*Chlorine reaction products* means all halogenated organic compounds formed as a consequence of the discharge of chlorine and its oxidants; the term is synonymous with organohalide. Halogens are a group of chemically active, nonmetallic elements which include flourine, chlorine, bromine, iodine and astatine; halogens form negatively charged ions.

*Coagulant* means a cationic water clarifying agent which aggregates negatively-charged particles in the water into larger, particulates referred to as microfloc.

*CWA, or the Act*, means the Clean Water Act.

*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.

*Daily maximum discharge* means the highest allowable "daily discharge" and is also referred to as the "maximum daily discharge."

*Discharge Monitoring Report* (“DMR”) means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by “approved States” as well as by EPA.

*Discharge of a pollutant* means any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source".

*Domestic wastes* means materials discharged from showers, sinks, safety showers, eye-wash stations, hand-wash stations, galleys, and laundries.

$EC_{50}$ means a point estimate of the concentration of a substance producing a specific biological effect on 50% of the exposed organisms during a specific period of exposure.

*EPA* means the United States Environmental Protection Agency.

*EF* means degrees Fahrenheit.

*Facility* or activity means any NPDES “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

$LC_{50}$ means a point estimate of the concentration of a substance killing 50% of the exposed organisms during a specific period of exposure.

*Marine life return system* (MLRS) means the system designed to prevent fish from entering the seawater treatment plant (STP) feed pumps. Fish entering the STP are diverted through an outfall back to the receiving water by way of the MLRS.

*Maximum* means the highest measured discharge or pollutant in a waste stream during the time period of interest.

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

*MGD* means million gallons per day.

*mg/L* means milligrams per liter.

*Mixing zone* means the zone of dilution authorized by the Alaska Department of Environmental Conservation under 18 AAC 70.240-270 wherein pollutant concentrations may exceed the criteria of the Alaska Water Quality Standards for the proscribed pollutants.

*MLLW* means mean lower low water.

*Open-water* means less than an average of 25% ice coverage within a one mile radius of the discharge point. The open-water season shall extend from 1 July through 30 September, and may be extended with the demonstration of three consecutive days of less than 25% ice coverage within a one mile radius of the main plant outfall using polarized aerial photography.

*P.L.* means (U.S.) Public Law.

*Pollutant* means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

*Process wastewater* means any wastewater which, during processor operations, comes into direct contact with or results from the production or use of any raw material, intermediate product or by-product, or waste product.

*Sanitary wastes* means human body waste discharged from toilets and urinals.

*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.

*Sewage* means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes.

*SIC* means Standard Industrial Code, a numerical coding system which simplifies the management of data pertaining to types of industry.

*Slush ice* occurs during the initial stage of ice formation when unconsolidated individual ice crystals (frazil) form a slush layer at the surface of the water column.

*STP* means seawater treatment plant.

*Strainer/filter backwash* means all discharges associated with backwashing the strainers or filters of the seawater treatment plant. This includes discharges occurring during the filter draindown and prerun cycles.

*TSS* means total suspended solids, and includes settleable solids.

*Under ice discharges* means those discharges occurring from October 1 through June 30.

*Upset* means an exceptional incident in which there is unintentional and temporary noncompliance with 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.

*Water depth* means the depth of the water between the surface and the sea floor as measured at mean lower low water (0.0).