

**DIVISION OF AIR AND WATER QUALITY
STATE DISCHARGE PERMIT & CERT. PROGRAM**

610 University Avenue
Fairbanks, AK 99709-3643
PHONE: (907) 451-2360
FAX: (907) 451-2187
<http://www.state.ak.us/dec/>

October 3, 2000

File: 300.45.004

Mr. Raymond C. Vaseleski
Environmental Manager
HSE, Alaska
BP Exploration (Alaska) Inc.
900 East Benson Boulevard
P. O. Box 196612
Anchorage, Alaska 99519-6612

**Certified Mail 7099 3220 0003 7625 4287
Return Receipt Requested**

Re: Wastewater Disposal Permit No. 0073-DB053 for the Prudhoe Bay Unit (PBU), Central Sewage Treatment Facility (CSTF).

Dear Mr. Vaseleski:

The Department of Environmental Conservation has completed its review of your request for the renewal of ADEC Wastewater Disposal Permit No. 9573-DB001 and is issuing ADEC Wastewater Disposal Permit 0073-DB053. The permit will allow the discharge of a maximum of 175,000 gallons per day of tertiary treated domestic wastewater from the BP Exploration (Alaska) Inc., Central Sewage Treatment Facility (CSTF), serving the Base Operations Center (BOC) and other facilities located in Prudhoe Bay, Alaska. The activity will take place at Latitude 70° 17' 26" N, Longitude 148° 41' 51" W (Section 19, Township 11 N, Range 14 E, Umiat Meridian). The discharge is from an outflow line after chlorination and dechlorination chambers to an unnamed lake, East of the CSTF.

Please review the conditions and stipulations in this permit and ensure they are all understood. This permit is effective October 3, 2000 and expires October 2, 2005. This State of Alaska Wastewater Discharge Permit is being issued in accordance with AS 46 and 18 AAC 15.

As of February 19, 1993, the Department has begun collection of user fees for permit processing. One invoice for permit number 0073-DB053 is enclosed. Please submit the remittance copy along with your payment, to the address below or the address indicated on the invoice.

Alaska Department of Environmental Conservation
Division of Air and Water Quality
State Discharge Permit & Certification Plan Program
410 Willoughby Avenue Suite #303
Juneau, AK 99801-1795

Clean Air, Clean Water

Department regulations provide that if you disagree with this decision you may request an adjudicatory hearing in accordance with 18 AAC 15.200-910. The request should be mailed to the Commissioner, Alaska Department of Environmental Conservation, 410 Willoughby Avenue, Suite#303, Juneau, Alaska 99801-1795, by certified mail, return receipt requested. A copy of the request shall also be sent to the undersigned. Failure to submit a request within thirty days of service of this letter shall constitute a waiver of your right to administrative review of the decision. In addition, any other person who disagrees with this decision may request an adjudicatory hearing within thirty days of service of the enclosed permit. Any hearing granted will be limited to issues related to the issuance of this permit.

Sincerely,

SIGNATURE ON FILE

William D. McGee
Program Manager
Water Discharge Permits

enc: Permit No. 0073-DB053

cc: Tim Wingerter, ADEC/Fairbanks
Abigail Ogbe, ADEC/Fairbanks
ADF&G/Fairbanks
ADNR/ Fairbanks

**STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
610 UNIVERSITY AVENUE
FAIRBANKS, AK 99709-3643**

WASTEWATER DISPOSAL PERMIT

Permit 0073-DB053

Date: October 3, 2000

This Wastewater Disposal Permit is issued to BP Exploration (Alaska) Inc., for the disposal of a maximum of 175,000 gallons per day of tertiary treated domestic wastewater from the BP Exploration (Alaska) Inc., Central Sewage Treatment Facility (CSTF), serving the Base Operations Center (BOC) and other facilities located in Prudhoe Bay, Alaska. The activity will take place at Latitude 70° 17' 26" N, Longitude 148° 41' 51" W (Section 19, Township 11 N, Range 14 E, Umiat Meridian). After secondary treatment with Activated Biological filters followed by aeration and clarification, the wastewater undergoes tertiary treatment through pressure sand filters and is then discharged from an outflow line after chlorination and dechlorination to an unnamed lake, East of the CSTF.

This permit is subject to the conditions and stipulations contained in Appendices A, B and C, which are incorporated herein by reference. Appendix C is the form to be used for reporting discharge monitoring results. Copies should be made from the original for reporting purposes.

This permit is effective October 3, 2000 and expires October 2, 2005. It may be terminated or modified in accordance with AS 46.03.120.

SIGNATURE ON FILE

William D. McGee
Program Manager
Water Discharge Permits

APPENDIX A - SPECIFIC PERMIT CONDITIONS

I. EFFLUENT AND MIXING ZONE LIMITATIONS

- a. During the period beginning on the effective date of this permit and lasting through the expiration or termination date, the permittee is authorized to discharge tertiary treated domestic wastewater from the Central Sewage Treatment Facility (CSTF) at Prudhoe Bay, Alaska.
- b. The treated domestic wastewater is discharged from a tertiary wastewater treatment plant, into an unnamed lake. The permit limits must be met at the end of the effluent line, prior to discharge into the receiving water, with the exception of the mixing zone total chlorine and fecal coliform bacteria limitations, which must meet the specified limitations at the outer edge of the mixing zone, (mixing zone size is defined in section c. below).
- c. This discharge is assigned a mixing zone for the purpose of achieving sufficient dilution to meet the Alaska Water Quality Standards for fecal coliform bacteria and total chlorine. The mixing zone for this discharge is defined as the total area extending 100 meters downstream from the end of the outfall line. It is the responsibility of the permittee to inform this department in writing, if any area inside the mixing zone is used for contact or recreation.
- d. The discharge must be free of any additives such as antifreeze solutions, methanol, solvents, corrosion inhibitors, garbage, toxic substances, grease or oils which produce a sheen, foam (other than trace amounts), or other contaminants.
- e. The discharge must not cause or contribute to a violation of the Alaska Water Quality Standards (18 AAC 70).
- f. No other treated or untreated wastewater, sludge, or other materials shall be discharged to the lands or waters of the state unless otherwise approved by the department.
- g. The wastewater discharged to the lands or waters of the state must not exceed the following limitations:

<u>Effluent Characteristic</u>	<u>Minimum Value</u>	<u>Thirty-Day Average</u>	<u>Seven-Day Average</u>	<u>Maximum Value</u>
Total Flow	N/A	150,000 gpd	N/A	175,000 gpd ¹
5-day Biochemical Oxygen Demand	N/A	30 mg/l ²	45 mg/l	60 mg/l
Total Susp. Solids	N/A	30 mg/l	45 mg/l	60 mg/l
Total Residual	N/A	N/A	N/A	1 mg/l

Chlorine				
Fecal Coliform Bacteria (FC)	N/A	200 per 100 ml ^{3&5}	300 per 100 ml ^{3&5}	400 per 100 ml ⁷
pH	6.5	N/A	N/A	8.5
Dissolved Oxygen	2 mg/l	N/A	N/A	17mg/l
Oil sheen	no sheen	no sheen	no sheen	no sheen

<u>Mixing Zone Characteristic</u>	<u>Thirty-Day Average</u>	<u>Seven-Day Average</u>	<u>Maximum Value</u>
Total Chlorine (Outside edge of MZ ⁴)	N/A	N/A	0.002 mg/l ⁸
Fecal Coliform Bacteria (Outside edge of MZ ⁴)	20/100 ml FC ⁶	N/A	40/100 ml ⁷
Dissolve Oxygen (Outside edge of MZ ⁴)	6 mg/l	N/A	17 mg/l
pH (Outside edge of MZ ⁴)	6.5 & within 0.5 of background	N/A	8.5 & within 0.5 of background

Footnotes:

- ¹ gallons per day (gpd);
- ² milligrams per liter (mg/l);
- ³ milliliter (ml);
- ⁴ mixing zone (MZ);
- ⁵ all effluent fecal coliform average results must be reported as the arithmetic mean;
- ⁶ all mixing zone fecal coliform results must be reported as the geometric mean;
- ⁷ not more than 10% of the samples taken may exceed this value;
- ⁸ the Alaska Water Quality Standards, (18 AAC 70), limit is 0.002 mg/l for total residual chlorine, but the detection limit for monitoring purposes in this permit is 0.1 mg/l.

II. MONITORING AND REPORTING

a. **MONITORING OF PLANT EFFLUENT AND RECIEVING WATER**

The permittee must monitor the wastewater effluent and the receiving water, (at perimeter of mixing zone), in the following manner while the treated wastewater is being discharged:

<u>Effluent Characteristic</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Total Flow	Daily	Measured
5-day Biochemical Oxygen Demand	Monthly ²	Grab or composite ¹

Total Susp. Solids	Monthly ²	Grab or composite ¹
Total Chlorine Residual	Weekly ²	Grab
Fecal Coliform Bacteria	Monthly ²	Grab
pH	Weekly ²	Grab
Dissolved Oxygen	Monthly ²	Grab
Oil Sheen	Daily	Observation

<u>Mixing Zone Characteristic</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Total Chlorine (outside edge of MZ)	Upon request by the department ³	Grab
Fecal Coliform Bacteria (outside edge of MZ)	Twice yearly	Grab
pH (outside edge of MZ)	Upon Dept. Request ³	Grab
Dissolved Oxygen (outside edge of MZ)	Upon Dept. Request ³	Grab

Footnotes:

- ¹ Composite samples must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow (7-9 a.m. and 6-8 p.m.).
- ² Week shall be the time period of Sunday through Saturday. Month shall be the time period of the calendar month. Quarter shall be the time period of three months based on the calendar year beginning with January. Twice per year or bi-annual shall consist of two time periods during the calendar year, (Oct. through April and May through Sept.). Annual or yearly shall be once per calendar year.
- ³ Reasonable potential to exceed these limits does not appear to exist and therefore monitoring will not normally be required, however the department may request the monitoring in the future by contacting the permittee.

b. TEST PROCEDURES

Test procedures for the analysis of pollutants must conform to methods sited in 18 AAC 70.020(c), or as such regulations may be amended. The permittee may substitute alternative methods of monitoring or analysis upon receipt of prior written approval from the department.

c. REPRESENTATIVE SAMPLING

Samples and measurements taken as required must be representative of the volume and nature of the monitored discharge.

d. ADDITIONAL MONITORING

If the permittee monitors any influent or effluent characteristic identified in this permit more frequently than required, the results of such monitoring must be reported to the department in the monitoring report.

e. BEST MANAGEMENT PRACTICE (BMP)

The permittee must continue with the implementation of the BP Exploration (Alaska) Inc.'s (BPXA's) Prudhoe Bay Unit (PBU) Base Operations Camp (BOC) Central Sewage Treatment Facility's February 2000 BMP. This plan establishes objectives and mechanisms to minimize waste, optimize operation and maintenance of the facility and maximize protection of receiving waters. The BMP is designed to control non-domestic influent from entering into the treatment facility and monitor eutrophication in the receiving water. The BMP is also designed to control spillage, leaks, waste disposal, and optimize the domestic wastewater treatment efficiency.

III. REPORTING

Monitoring results obtained during a reporting period must be summarized and reported to the department and postmarked no later than the 14th day of the month following the completed reporting period. Reporting must begin at the commencement of discharge. Signed copies of these, and all other reports required herein, must be submitted to the department at the following address:

Alaska State Dept. of Environmental Conservation
Division of Air and Water Quality
555 Cordova Street,
Anchorage, AK 99501
Telephone: (907) 269-3059
Fax: (907) 269-3098

Knowingly making a false statement, by the permittee, the operator, or other employees, including contractors, on any such report may result in the imposition of criminal penalties as provided for under AS 46.03.790.

IV. MANAGEMENT PRACTICES

a. PROPER OPERATION AND MAINTENANCE

The permittee must 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.

b. REMOVED SUBSTANCES

Collected grit, scum, sludge, or other pollutants removed in the course of treatment or control of wastewater must be disposed of in a state approved, permitted manner. If this facility wishes to dispose of these substances onsite, the disposal must be addressed in a separate permit.

c. WARNING SIGNS

At least one sign shall be posted near the discharge area. The sign must provide the identity and telephone numbers of the discharger; must inform the public that a mixing zone exists, that treated wastewater is being discharged and that users of the area should exercise caution.

V. RECORDS RETENTION

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, and calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation must be retained in Alaska for observation by the department for five years. Upon request from the department, the permittee must submit certified copies of such records.

VI. CHANGE IN DISCHARGE

All discharges authorized herein must be consistent with the terms and conditions of this permit. The discharge of any pollutant or toxic material, (including oil, grease, or solvents), more frequently than, or at a concentration or limit not authorized, shall constitute noncompliance with the permit. Any anticipated facility expansions, flow increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new waste disposal permit application, or if such changes will not violate the effluent limitations specified in this permit, by written notice to the department at the address specified, at least thirty days before the implementation of such changes. Physical changes may also be subject to plan review by the department.

VII. TOXIC POLLUTANTS

If a toxic pollutant (including oil, grease, or solvents) concentration standard is established in accordance with 18 AAC 70, for a pollutant present in this discharge, and such standard is more stringent than the limitation in this permit, this permit is considered to be modified in accordance with the toxic pollutant concentration standard.

VIII. ACCIDENTAL DISCHARGES

The permittee must provide protection from accidental discharges not in compliance with the provisions of this permit. Facilities to prevent such discharges must be maintained in good working condition at all times by the permittee.

IX. NONCOMPLIANCE NOTIFICATION

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any effluent limitation specified in this permit, the permittee must report the noncompliance to the department within 24 hours, or as soon as possible of becoming aware of such conditions.
- b. A written follow-up report must be sent to the department within seven days of the noncompliance event. The written report must contain, but not be limited to:
 1. Times and dates on which the event occurred, and if not corrected, the anticipated time the noncompliance is expected to continue.
 2. A detailed description of the event, including quantities and types of materials involved.
 3. Details of any actual or potential impact on the receiving environment or public health.
 4. Details of actions taken or to be taken to correct the causes of the event.
 5. Details of actions taken or to be taken to correct any damage resulting from the event.

- c. It is recognized that influent quality changes, equipment malfunctions, or uncontrollable circumstances may sometimes result in effluent concentrations exceeding the permit limitations, despite the exercise of all possible care and maintenance measures and corrective measures by the permittee. The permittee must demonstrate to the department that such circumstances did exist where, despite all evasive measures, the effluent concentrations exceeded those set forth in this permit. The Commissioner shall consider such evidence in determining departmental actions. The department does not waive any of its legal rights during such consideration.

X. TRANSFER OF OWNERSHIP

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee must notify the succeeding owner or controller of the existence of this permit in writing, a copy of which must be forwarded to the Department of Environmental Conservation at the address in this permit. The original permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the Department approves assignment of the permit. The Department will not unreasonably withhold such approval.

APPENDIX B - GENERAL PERMIT CONDITIONS

I. ACCESS AND INSPECTION

The permittee must allow the Commissioner or his representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, state laws and regulations.

II. INFORMATION ACCESS

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit must be available for public inspection at the State of Alaska Department of Environmental Conservation, 555 Cordova Street, Anchorage, Alaska 99501.

III. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including, but not limited to, accidents, equipment breakdowns, or labor disputes.

IV. AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the disposal facility.

V. ADVERSE IMPACT

The permittee must take all necessary precautions to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the non-complying activity. The permittee must cleanup and restore all areas adversely impacted by the noncompliance.

VI. CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work, which would disturb such resources, is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907-269-8721).

VII. APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

VIII. OTHER LEGAL OBLIGATIONS

The requirements, duties, and obligations set forth in this permit are in addition to any requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any and all necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit must comply with all applicable federal and state laws and regulations.

IX. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that effect waste generation, the permittee shall consider the following order of priority options:

1. Waste source reduction.
2. Recycling of waste.
3. Waste treatment.
4. Waste disposal.