

Division of Air and Water Quality  
Watershed Management  
610 University Avenue  
Fairbanks, AK 99709-3643

Director's Office: (907) 465-5260  
Fairbanks Office: (907) 451-2360  
Fax: (907) 451-2187  
File: 9513-DB027

April 1, 1997

Mr. Dave Pflaum  
Herring Bay Wastewater Marine Outfall  
8256 - South Tongrass  
Ketchikan, Alaska 99901

**Certified Mail**  
**Return Receipt Requested**  
**P 127 600 224**

Re: Herring Bay Wastewater Marine Outfall, Located in Herring Bay, in George Inlet,  
Approximately 4 Miles East of Ketchikan, Alaska  
Domestic Wastewater Disposal Permit 9513-DB027

Dear Mr. Pflaum:

The Department of Environmental Conservation has completed its review of your wastewater disposal application and is issuing Wastewater Disposal Permit 9513-DB027. The permit will allow the discharge of up to 20,000 gallons per day of secondary treated domestic wastewater to Herring Bay, in George Inlet, via a 6 inch diameter, 575 foot long outfall line, with a 10 foot diffuser, placed at an elevation of -24 feet at M.L.L.W. The activity will take place at Latitude 55<sup>0</sup> 19' 38" N, Longitude 131<sup>0</sup> 31' 16" W, (Section 36, Township 75 S, Range 91 E, Copper River Meridian). Please review the conditions and stipulations in this permit and ensure they are all understood. This permit is effective upon issuance and expires March 31, 2002. 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. An invoice for permit number 9513-DB027 is enclosed. Please submit the remittance copy, along with your payment, to:

Alaska Department of Environmental Conservation  
Division of Air and Water Quality  
Fiscal Section  
410 Willoughby Avenue  
Juneau, AK 99801-1795

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 105, 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. If an adjudicatory hearing is thereafter granted, all permit conditions remain in full force and effect.

Sincerely,

**SIGNATURE ON FILE**

Timothy J. Wingerter  
Wastewater Treatment and Disposal Team Leader  
Watershed Development

tjw/rg {K:\AWQ\WPC\9513027.PMT}

cc: Deena Henkins, ADEC/Juneau  
Jeff Wedekind, R&M Engineering/Ketchikan  
Mary Siroky, ADEC/Juneau  
Joan Hughes, ADEC/Juneau  
Dave Sturdevant, ADEC/Juneau  
Jennifer Garland, DGC/Juneau  
ADEC/SPS Office/Ketchikan  
ADF&G/Juneau



**STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
610 UNIVERSITY AVENUE  
FAIRBANKS, ALASKA 99701**

**WASTEWATER DISPOSAL PERMIT**

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Permit 9513-DB027

Date: April 1, 1997

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This Wastewater Disposal Permit is issued to Mr. Dave Pflaum for the disposal of up to 20,000 gallons per day of secondary treated domestic wastewater from the Herring Bay Wastewater Marine Outfall, located in Herring Bay, in George Inlet, approximately 4 miles east of Ketchikan, Alaska. The activity will take place at Latitude 55<sup>0</sup> 19' 38" N, Longitude 131<sup>0</sup> 31' 16" W, (Section 36, Township 75 S, Range 91 E, Copper River Meridian). The disposal will take place in Herring Bay, at an elevation of approximately -24 feet M.L.L.W., via a 6-inch diameter, 575 foot long outfall line with a 10 foot long diffuser. This permit is subject to the conditions and stipulations contained in Appendices A and B, which are incorporated herein by reference.

This permit is issued under the provisions of Alaska Statute 46.03, the Alaska Administrative Code, as amended or revised, and other applicable state laws and regulations.

This permit is effective upon issuance and expires March 31, 2002. It may be terminated or modified in accordance with AS 46.03.120.

**SIGNATURE ON FILE**

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Timothy J. Wingerter  
Wastewater Treatment and Disposal Team Leader  
Watershed Management Section

**APPENDIX A - SPECIFIC PERMIT CONDITIONS**

**I. EFFLUENT 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 secondary treated domestic wastewater from the Herring Bay Wastewater Marine Outfall, (located approximately 4 miles east of Ketchikan, Alaska), as specified in this section.
- b. The wastewater discharged to the lands or waters of the state shall not exceed the following limitations:

<b><u>Effluent Characteristic</u></b>	<b><u>Thirty-Day Average</u></b>	<b><u>Seven-Day Average</u></b>	<b><u>Maximum Value</u></b>
Total Flow	15,000 gpd*	18,000 gpd	20,000 gpd
5-day Biochemical Oxygen Demand	30 mg/l**	45 mg/l	60 mg/l
Total Suspended Solids	30 mg/l	45 mg/l	60 mg/l
Fecal Coliform Bacteria <sup>+</sup>	1 X 10 <sup>5++</sup> per 100 ml***	N/A	1.5 X 10 <sup>5+++</sup> per 100 ml
Total chlorine Residual	N/A	N/A	0.0 mg/l

<b><u>Maxing Zone Characteristic</u></b>	<b><u>Thirty-Day Average</u></b>	<b><u>Seven-Day Average</u></b>	<b><u>Maximum Value</u></b>
Fecal Coliform Bacteria <sup>+</sup> (Shoreline in MZ)	200/100 ml <sup>++</sup>	N/A	400/100 ml <sup>+++</sup>
Fecal Coliform Bacteria <sup>+</sup> (Outside MZ)	14/100 ml <sup>++</sup>	N/A	43/100 ml <sup>+++</sup>

\* gallons per day (gpd); \*\* milligrams per liter (mg/l); \*\*\* milliliter (ml)

<sup>+</sup> All fecal coliform results must be reported as the geometric mean.

<sup>++</sup> 30-day average based on a minimum of 5 samples. For less than 5 samples, the 30-day average value is the daily maximum value.

<sup>+++</sup> Not more than 10% of the samples taken may exceed this value.

**I. EFFLUENT LIMITATIONS (cont.)**

- c. The secondary treated domestic wastewater is discharged from a marine outfall line to the marine waters of Herring Bay. The permit limits must be met at the effluent line, prior to discharge into Herring Bay, with the exception of the mixing zone fecal coliform bacteria limitations, which must meet the specified limitations at shoreline areas within the mixing zone, (if applicable), and at the outer edge of the mixing zone, (mixing zone size is defined in section f.).
- d. The pH of the effluent shall be between 6.5 and 8.5 pH units or within 0.5 units of the pH of the receiving water at all times.
- e. The dissolved oxygen in the effluent shall not be less than 2.0 mg/L at any time.
- f. 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. The mixing zone for this discharge is defined as a circle of 100 meter radius, centered on the end of the outfall line, extending from the end of the outfall line to the surface. It shall be the responsibility of the permittee to inform this department, in writing, if water from inside of the mixing zone is used, or is intended to be used as a water supply for aquaculture or seafood processing, or if any area inside the mixing zone is used for contact water recreation or the harvesting for consumption of raw mollusks or other raw aquatic life. These marine water uses are defined in the Alaska Water Quality Standards (18 AAC 70).
- g. Chemical disinfection of the wastewater effluent shall not occur without prior approval of the department.
- h. The discharge shall be free of any additives such as antifreeze solutions, methanol, solvents, corrosion inhibitors, garbage, toxic substances, grease or oils which produce a sheen, foam in other than trace amounts, or other contaminants.
- i. The discharge shall not cause or contribute to a violation of the Alaska Water Quality Standards (18 AAC 70).
- j. 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.

**II. MONITORING AND REPORTING**

- a. Monitoring of Wastewater Treatment Plant Effluent  
The permittee shall monitor the wastewater discharge in the following manner while the treated wastewater is being discharged:

**II. MONITORING AND REPORTING (cont.)**

<b><u>Effluent Characteristic</u></b>	<b><u>Minimum Frequency</u></b>	<b><u>Sample Type</u></b>
Total Flow	Weekly <sup>2</sup>	Estimate or measured
pH		Quarterly <sup>2</sup> Grab
5-day Biochemical Oxygen Demand	Quarterly <sup>2</sup>	Grab or composite <sup>1</sup>
Total Suspended Solids	Quarterly <sup>2</sup>	Grab or composite <sup>1</sup>
Dissolved Oxygen by department	Upon request	Grab
Fecal Coliform Bacteria	Quarterly <sup>2</sup>	Grab
Total Chlorine Residual	N/A	N/A

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<b><u>Mixing Zone Characteristic</u></b>	<b><u>Minimum Frequency</u></b>	<b><u>Sample Type</u></b>
Dissolved Oxygen (outside leading edge of mixing zone)	Upon request by the department	Grab
Fecal Coliform Bacteria (outside leading edge of mixing zone)	Twice per year <sup>2</sup> (from the outside leading edge of the mixing zone)	Grab
Fecal Coliform Bacteria (shoreline area in the mixing zone)	Twice per year <sup>2</sup> (from the shoreline area within the mixing zone)	Grab

<sup>1</sup> 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.).

<sup>2</sup> 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 based on the calendar year beginning with January. Twice per year or bi-annual shall consist of two time periods during the calendar year, (fall/winter = Sept. Through Feb. and Spring/summer = Mar. Through Aug.).

## **II. MONITORING AND REPORTING (cont.)**

### **b. TEST PROCEDURES**

Test procedures for the analysis of pollutants shall 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 shall be representative of the volume and nature of the monitored discharge. Mixing zone samples must be collected from the down current, down stream or down slope outside edge of the mixing zone. Shoreline samples must be collected from within the mixing zone at the shoreline area of human use closest to the effluent line outlet or center of the diffuser.

### **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 shall be reported to the department in the monitoring report required under Appendix A, paragraph III of this report.

## **III. REPORTING**

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

Alaska State Dept. of Environmental Conservation  
Division of Air and Water Quality  
410 Willoughby Avenue, Suite 105  
Juneau, Alaska 99811-1800  
Telephone: (907) 451-2600

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 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.

b. Removed Substances

Collected grit, scum, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall 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.

#### **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 shall be retained in Alaska for observation by the department for five years. Upon request from the department, the permittee shall submit certified copies of such records.

#### **VI. CHANGE IN DISCHARGE**

All discharges authorized herein shall 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 in Appendix A, paragraph III, 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 shall provide protection from accidental discharges not in compliance with the provisions of this permit. Facilities to prevent such discharges shall 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 shall 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 shall be sent to the department within seven days of the noncompliance event. The written report shall 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 may 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 shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department of Environmental Conservation at the address in Appendix A, paragraph III of this permit.

## **APPENDIX B - GENERAL PERMIT CONDITIONS**

### **I ACCESS AND INSPECTION**

The permittee shall 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 shall be available for public inspection at the State of Alaska Department of Environmental Conservation, Willoughby Ave., Suite 105, Juneau, Alaska 99801.

### **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 shall take all necessary means 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 noncomplying activity. The permittee shall 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 (907-762-2622).

### **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 shall 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:

waste source reduction,

recycling of waste,

waste treatment, and

waste disposal.