



**ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
INDIVIDUAL PERMIT – Preliminary DRAFT**

Permit Number: AK0052566

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501**

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations. The

SEWARD ASSOCIATION FOR THE ADVANCEMENT OF MARINE SCIENCE

is authorized to discharge from the Alaska SeaLife Center facility at Resurrection Bay, 301 Railway Avenue, Seward, Alaska at the following location:

Outfall	Receiving Water or Body	Latitude	Longitude
001A	Resurrection Bay	60.0989030° North	149.4399160° West

In accordance with the discharge points effluent limitations, monitoring requirements, and other conditions set forth herein:

This permit and authorization shall become effective DRAFT

This permit and the authorization to discharge shall expire at midnight, DRAFT

The permittee shall reapply for a permit reissuance on or before DRAFT, 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.

The permittee shall post or maintain a copy of this permit to discharge at the facility and make it available to the public, employees, and subcontractors at the facility.

Signature

DRAFT

Printed Name

DRAFT

Date

Program Manager

Title

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SCHEDULE OF SUBMISSIONS

The Schedule of Submissions summarizes some of the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (DEC or the Department) during the term of this permit. The permittee is responsible for all submissions and activities even if they are not summarized below.

Table 1: Schedule of Submissions

Permit Part	Submittal or Completion	Frequency	Due Date	Submit to ^a
Permit Part 2.4, Appendix A, 3.2	Discharge Monitoring Report (DMR)	Monthly	Must be submitted electronically through the eDMR system, on or before the 15th day of the following month.	NetDMR
Appendix A, 1.3	Application for Permit Reissuance	1/permit cycle	180 days before expiration of the final permit	Permitting
Appendix A, 3.4	Oral notification of noncompliance	As Necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance
Appendix A, 3.4	Written notification of noncompliance	As Necessary	Within 5 days after the permittee becomes aware of the circumstances	Compliance
a) See Appendix A 1.1 for addresses				

1.0 LIMITATIONS AND MONITORING REQUIREMENTS

1.1 Discharge Authorization

- 1.1.1 During the effective period of this permit, the permittee is authorized to discharge pollutants from Outfall 001A specified herein to Resurrection Bay within the limits and subject to conditions set forth herein. This permit authorizes discharge of only those pollutants resulting from facility processes, waste streams, and operations clearly identified in the permit application process.

1.2 Effluent Limits and Monitoring

- 1.2.1 The permittee must limit and monitor discharges from Outfall 001A as specified in Table 2. All values represent maximum effluent limits, unless otherwise indicated. The permittee must comply with effluent limitations in the table at all times unless otherwise indicated, regardless of monitoring frequency or reporting required by other provisions of this permit.
- 1.2.2 Discharge shall not cause contamination of surface or ground waters, and shall not cause or contribute to a violation of the Alaska Water Quality Standards (18 Alaska Administrative Code (AAC) 70), unless allowed in this permit and the excursions are authorized in accordance with applicable provisions in 18 AAC 70.200 – 70.240 (e.g. variance, mixing zone).
- 1.2.3 The permittee must not discharge any floating solids, debris, sludge, deposits, foam, scum or other residues that cause a film, sheen, or discoloration on the surface of the receiving water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.
- 1.2.4 For all effluent monitoring, the permittee must use a sufficiently sensitive Environmental Protection Agency (EPA) approved test method that quantifies the pollutants to a level lower than applicable limits or water quality standards or use the most sensitive test method available, per Title 40 Code of Federal Regulations (CFR) Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), adopted by reference at 18 AAC 83.010(f).
- 1.2.5 For purposes of reporting on the discharge monitoring report (DMR) for a single sample, if a value is less than the method detection limit (MDL), the permittee must report “less than (<) {numeric value of MDL}” and if a value is less than the minimum level (ML) [also called a reporting limit (RL), practical quantification limit (PQL), or limit of quantitation (LOQ)] the permittee must report “less than (<) {numeric value of ML}.”
- 1.2.6 For purposes of calculating monthly averages, zero may be assigned for values less than the MDL and the numeric value of the MDL may be assigned for values between the MDL and the RL. If the average value is less than the MDL, the permittee must report “less than (<) {numeric value of MDL}” and if the average value is less than the RL, the permittee must report “less than (<) {numeric value of RL}.” If a value is equal to or greater than the RL, the permittee must report and use the actual value. The resulting average value must be compared to the compliance level in assessing compliance.
- 1.2.7 Permittees have the option of taking more frequent samples than are required in the permit. These samples must be used for averaging if they are conducted using DEC approved test methods (generally found in 18 AAC 70 and 40 CFR §136 [adopted by reference in 18 AAC 83.010]) and if the method detection limits are less than the effluent limits.

Table 2: Outfall 001A Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits					Monitoring Requirements		
	Units ^a	Daily Minimum	Monthly Average	Weekly Average	Daily Maximum	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	mgd	N/A	8.1	Report	8.1	Effluent	1/Week	Estimated
pH	SU	6.5	N/A	N/A	8.5	Effluent	1/Month	Grab
Temperature	° C	N/A	N/A	N/A	Report	Effluent	1/Month	Grab
Dissolved Oxygen (DO)	mg/L	Report	N/A	N/A	Report	Effluent	1/Month	Grab
Fecal Coliform Bacteria (FC)	FC/100 mL	N/A	14 ^b	N/A	43 ^c	Effluent	1/Quarter ^d	Grab
Enterococci Bacteria	cfu/100 mL	N/A	35 ^b	N/A	130 ^c	Effluent	1/Quarter ^e	Grab

Footnotes:

- a. Units: mgd = million gallons per day, SU = standard units, °C = degrees Celsius, mg/L = milligrams per liter, FC/100 mL = Fecal Coliform per 100 milliliters, and cfu/100 mL = colony forming units per 100 milliliters.
- b. If more than one FC bacteria or enterococci bacteria sample is collected within the reporting period, the average results must be reported as the geometric mean. When calculating the geometric mean, replace all results of zero, 0, with a one, 1. The geometric mean of “n” quantities is the “nth” root of the quantities. For example the geometric mean of 100, 200, and 300 is $(100 \times 200 \times 300)^{1/3} = 181.7$.
- c. If less than ten samples are collected within a 30-day period, the effluent limit cannot be exceeded. If ten or more samples are collected within a 30-day period, not more than 10% of the samples may exceed the effluent limit.
- d. Once per quarter means the time period of three months based on the calendar year: Jan-March, April-June, July-Sept, and Oct-Dec
- e. One sample shall be collected for each of two quarters defined as May-June and July-September, on the same day as a fecal coliform bacteria sample is collected.

1.3 Mixing Zone

- 1.3.1 In accordance with state regulations at 18 AAC 70.240, no mixing zone is authorized for the discharge from the Alaska SeaLife Center (ASLC). The total discharge at Outfall 001A must meet all State of Alaska Water Quality Standards (WQS) prior to discharge into Resurrection Bay.

2.0 SPECIAL CONDITIONS**2.1 Quality Assurance Project Plan**

- 2.1.1 The permittee must develop, implement and maintain a quality assurance project plan (QAPP) for all monitoring required by this permit. The QAPP must be developed and implemented within 180 days of the effective date of this permit. Any existing QAPP for the facility may be reviewed and modified under this section.
- 2.1.2 The QAPP must be designed to assist in planning for the collection and analysis of all samples in support of the permit and to help explain data anomalies whenever they occur.
- 2.1.3 The permittee may use either the generic DEC [Wastewater Treatment Facility Quality Assurance Project Plan](#) (DEC QAPP) or a facility-specific QAPP. Some facility specific information is required to complete the QAPP when using the generic DEC QAPP.

- 2.1.4 Throughout all sample collection and analysis activities, the permittee must use DEC-approved Quality Assurance/Quality Control and chain-of-custody procedures, as described in the *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5, March 2001) at https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5, December 2002) at <https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf>. The QAPP must be prepared in the format specified in these documents.
- 2.1.5 At a minimum, a QAPP must include:
- 2.1.5.1 Details on number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements;
 - 2.1.5.2 Maps indicating the location of each sampling point;
 - 2.1.5.3 Qualification and training of personnel; and
 - 2.1.5.4 Name, address, and telephone number of all laboratories used by or proposed to be used by the permittee.
- 2.1.6 The permittee must amend the QAPP whenever sample collection, sample analysis, or other procedure addressed by the QAPP is modified.
- 2.1.7 An electronic or physical copy of the QAPP must be kept on site and made available to DEC upon request.

2.2 Best Management Practices Plan

- 2.2.1 Purpose. Through implementation of the best management practices (BMP) Plan the permittee must prevent or minimize the generation and the potential for release of pollutants from the facility to the lands and waters of the U.S. through normal and ancillary activities.
- 2.2.2 Update and Implementation Schedule. The permittee must update and implement a BMP Plan which achieves the objectives and the specific requirements listed below. The permittee must submit written notice to DEC that the plan has been revised or updated within 90 days of the effective date of the revision. Any existing BMP Plans may be modified for compliance with this Part.
- 2.2.3 Objectives. The permittee must develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.
- 2.2.3.1 The number and quantity of pollutants and the toxicity of effluent generated, discharged, or potentially discharged at the facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.
 - 2.2.3.2 Under the BMP Plan and especially within any standard operating procedures in the BMP Plan, the permittee must ensure proper operation and maintenance of water management and wastewater treatment systems. BMP Plan elements must be developed in accordance with good engineering practices.

2.2.3.3 Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to lands and waters of the U.S. due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

2.2.4 Elements of the BMP Plan. The BMP Plan must be consistent with the objectives above and the general guidance contained in [*Guidance Manual for Developing Best Management Practices*](#) (EPA 833-B-93-004, October 1993) and [*Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices*](#) (EPA 832-R-92-006) or any subsequent revision to these guidance documents.

2.2.4.1 Plan Components. The BMP Plan must include, at a minimum, the following items:

2.2.4.1.1 Statement of BMP Policy. The BMP Plan must include a statement of management commitment to provide the necessary financial, staff, equipment, and training resources to develop and implement the BMP Plan on a continuing basis.

2.2.4.1.2 The BMP Plan must establish a BMP Committee responsible for developing, implementing, and maintaining the BMP Plan. Specify the structure, functions, and procedures of the BMP Committee.

2.2.4.1.3 Description of potential pollutant sources.

2.2.4.1.4 Risk identification and assessment.

2.2.4.1.5 Standard operating procedures to achieve the above objectives and specific best management practices (Section 2.2.4.2).

2.2.4.1.6 Reporting of BMP incidents. The reports must include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.

2.2.4.1.7 Materials compatibility.

2.2.4.1.8 Good housekeeping.

2.2.4.1.9 Inspections.

2.2.4.1.10 Preventative maintenance and repair.

2.2.4.1.11 Security.

2.2.4.1.12 Employee training.

2.2.4.1.13 Record keeping and reporting.

2.2.4.1.14 Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP plan are considered as part of the modifications.

2.2.4.1.15 Final constructed site plans, drawings, and maps (including detailed storm water outfall/culvert configurations).

2.2.4.2 Specific Best Management Practices. The BMP Plan must establish specific BMPs or other measures to achieve the objectives which ensure that the following specific requirements are met:

- 2.2.4.2.1 Solids, sludge, or other pollutants removed in the course of treatment or control of water and wastewaters must be disposed of in a manner to prevent any pollutant from such materials from entering waters of the U.S.
 - 2.2.4.2.2 Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP Plan.
 - 2.2.4.2.3 An annual review of the preventative maintenance procedures and system testing checks put in place to test the UV and ozone disinfection system and to make changes, if needed, to address concerns raised as part of the release potential identification and assessment.
- 2.2.5 Review and Certification. The BMP must be reviewed and certified annually as follows:
- 2.2.5.1 Annual review by the facilities director and BMP Committee.
 - 2.2.5.2 Certified statement the above reviews were completed and the BMP Plan fulfills the requirements set forth in this permit. The statement must be certified by the dated signatures of each BMP Committee member and kept on file with the BMP Plan and made available on request to DEC.
- 2.2.6 Copies of the BMP must be kept on site and made available to DEC upon request.
- 2.2.7 BMP Plan Modification
- 2.2.7.1 The permittee must amend the BMP Plan whenever a change in the facility or in the operation of the facility materially increases the generation of pollutants or their release or potential release to receiving waters.
 - 2.2.7.2 The permittee must amend the BMP Plan whenever the plan is found to be ineffective in achieving the general objective of preventing and minimizing the generation and the potential for the release of pollutants from the facility to waters of the U.S.
 - 2.2.7.3 Any changes to the BMP Plan must be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan must be reported in the annual certification required under Section 2.2.5.

3.0 GENERAL PROVISIONS

3.1 Electronic Reporting (E-Reporting) Rule

3.1.1 E-Reporting Rule for DMRs (Phase I).

The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into the NetDMR Portal (<https://cdxnodengn.epa.gov/oeca-netdmr-web/action/login>). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g. mixing zone receiving water data, etc.), shall be included as an attachment to the NetDMR submittal. DEC has established an e-Reporting Information website at <http://dec.alaska.gov/water/compliance/electronic-reporting-rule> that contains general information about this new reporting format.

3.1.2 E-Reporting Rule for Other Reports (Phase II).

Phase II of the E-Reporting rule will integrate electronic reporting for all other reports required by the Permit (e.g., Annual Reports and Certifications) and implementation is expected to begin December 2020. Permittees should monitor DEC's E-Reporting Information website <http://dec.alaska.gov/water/compliance/electronic-reporting-rule> for updates on Phase II of the E-Reporting Rule and will be notified when they must begin submitting all other reports electronically. Until such time, other reports required by the Permit may be submitted in accordance with Appendix A – Standard Conditions.

3.2 Cause to Modify or Revoke and Reissue

The Department may find cause to modify or revoke and reissue the permit under the provisions of 18 AAC 83.135. Cause to modify the permit may include the receipt by the Department of new information that was not available at the time of permit issuance and that would have justified the imposition of different permit conditions at the time of issuance.

3.3 Removed Substances

Collected screenings, grit, solids, scum, and other facility residuals, or other pollutants removed in the course of treatment or control of water and wastewaters shall be disposed of in a Department approved manner and method in accordance with 18 AAC 60, such as to prevent any pollution from such materials from entering navigable waters.