

**Department of Environmental Conservation
Response to Comments**

For

Ted Stevens Marine Research Institute

APDES Permit No. AK0053236

Public Noticed April 4, 2018 – May 7, 2018

Proposed Final, 2018



**Alaska Department of Environmental Conservation
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501**

1 Introduction

1.1 Summary of Facility / Permit

The National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) installation is a federally owned research facility, also known as the Ted Stevens Marine Research Institute (TSMRI) at Lena Point. The TSMRI pumps sea water from Favorite Channel through the facility for research and heat exchange system purposes. Discharge to Favorite Channel occurs via an 18-inch diameter outfall line at 58° 23' 26" North latitude and 134° 46' 34" West longitude, at approximately -200 feet mean lower low water (MLLW). The facility's discharge is composed of sand filter backwash water, UV-treated waste sea water from a satellite wet lab, ozone-treated waste sea water, and treated domestic wastewater. Up to two million gallons of wastewater is discharged daily. Identified pollutants of concern include domestic wastewater conventional pollutants; biochemical oxygen demand (BOD₅), total suspended solids (TSS), pH, temperature, ammonia, enterococci bacteria and fecal coliform bacteria, and Whole Effluent Toxicity (WET). The permit does not authorize a mixing zone.

1.2 Opportunities for Public Participation

The Department of Environmental Conservation (DEC or the Department) proposed to issue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit to the Ted Stevens Marine Research Institute. To ensure public, agency, and tribal notification and opportunities for participation, the Department:

- identified the permit on the annual Permit Issuance Plan posted online at: <http://dec.alaska.gov/water/wastewater.aspx>
- notified potentially affected tribes and local governments that the Department would be working on the permit via letter, fax and/or email on November 17, 2017
- posted a preliminary draft of the permit on-line for a 10-day applicant review on March 9, 2018, and notified tribes, local government(s), and other agencies
- posted public notice of the draft permit on April 4, 2018 on the Department's public notice web page
- posted the proposed final permit on-line for a 5-day applicant review on May 11, 2018
- sent email notifications via the APDES Program List Serve when the preliminary draft, draft, and proposed final permits were available for review

The Department received one comment from the NMFS Auke Bay Laboratories (the applicant) on the draft permit documents. The Department also requested comment from the Departments

of Natural Resources, Fish and Game, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency; however, no comments were received from these agencies on the draft permit.

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments.

1.3 Final Permit

The final permit was adopted by the Department on **pending**. There were no changes from the public noticed permit.

2 Whole Effluent Toxicity Testing

2.1 Comment Summary

NMFS Auke Bay Laboratories (the applicant) submitted a comment asserting that the Department misunderstood the facility's operations and constraints, thus erroneously determining that the facility's 2015 WET testing was not representative of facility operations and needed to be repeated during the next permit term. The comment requested that the Department either modify the permit to allow for WET testing at 7:00 am or remove the WET testing requirement from the permit altogether.

Response:

The Department must collect data needed to determine whether “discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity” (18 AAC 83.435(e)), and all APDES permits require that “samples and measurements taken for the purpose of monitoring must be representative of the monitored activity” (18 AAC 83.405(k)(1)). The regulatory definition of WET, at 18 AAC 83.990(79), is “the aggregate toxic effect of an effluent measured directly by a toxicity test.” This means that the test should be representative of all wastestreams discharged or potentially discharged during facility operations including domestic, filter backwash, laboratory, and seawater (and not only representative of laboratory operations). The Department reviewed the information provided by the applicant clarifying facility operations and constraints. As explained in the Fact Sheet Section 4.4.4, the Department determined that the Permit Part 1.4.2 once per five-year permit term WET testing requirements to achieve representative sampling are reasonable and necessary to meet state regulatory requirements. No changes were made to the permit documents based on this comment.