Department of Environmental Conservation
Response to Comments

For

City of Kenai
Kenai Wastewater Treatment Facility
APDES Permit No. AK0021377

Public Noticed March 3, 2021 – April 5, 2021

FINAL, April 8, 2021

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

1 Introduction

1.1 Summary of Facility / Permit

The Kenai Wastewater Treatment Facility (WWTF) is a publicly owned treatment works that treats domestic wastewater for the City of Kenai. The City of Kenai operates the Kenai WWTF.
Discharge Location: The wastewater discharge is transmitted through a marine outfall line to Cook Inlet at: latitude 60.5522° North, longitude 151.2777° West.
Description of Discharge: The wastewater effluent is secondary treated domestic wastewater that discharges at a flow rate of 1.3 million gallons per day. The main pollutants monitored in this wastestream are five-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), fecal coliform bacteria (FC), enterococci bacteria (enterococci), pH, dissolved oxygen (DO), total residual chlorine (TRC), total ammonia (ammonia), total recoverable copper (copper), total recoverable zinc (zinc), temperature, and chronic whole effluent toxicity (WET).
Mixing Zone: A chronic mixing zone has been authorized in the permit. The chronic mixing zone is defined as the area within a circle of 371-ft radius, centered on the point where the effluent enters marine water. The chronic mixing zone is authorized for: ammonia, copper, zinc, temperature, and WET. The mixing zone size is driven by the dilution required for ammonia and the dilution factor is 17.4. The chronic mixing zone dilution factor, size, and defined shape remain the same for conditions when the outfall is submerged and when it is exposed above the surface of the water. In addition, the acute mixing zone for discharges from Outfall 001A when the outfall is submerged has a dilution factor of 2.7 and is defined as the area within a circle of a 118-ft radius, centered on the end of the outfall pipe and extending from the marine bottom to the surface. The acute mixing zone is defined as the area within a half-circle of 118-ft radius centered on the point where the effluent enters marine water, for discharges at times when the end of the pipe is not under water due to tidal fluctuations. The acute mixing zone dilution factor remains the same for conditions when the outfall is submerged and when it is exposed above the surface of the water. The acute mixing zone size was driven by the dilution required for copper.

1.2 Opportunities for Public Participation

The Department of Environmental Conservation proposed to reissue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit to the City of Kenai for the Kenai WWTF. 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: https://dec.alaska.gov/water/wastewater/pip/
- notified potentially affected tribes and local governments that the Department would be working on this permit via letter, fax and/or email on August 25, 2020.
- posted a preliminary draft of the permit on-line for a 10-day applicant review on February 9, 2021 and notified tribes, local governments, and other agencies.

- formally posted public notice of the draft permit on March 3, 2021 on the Department's public notice web page.
- sent email notifications via the APDES Program List Serve when the preliminary draft and draft permits were available for review.

The Department did not receive any comments during the public notice period. The Department requested comment from the Departments of Natural Resources (DNR) Fish and Game (DFG), the National Marine Fisheries Service, the National Oceanic and Atmospheric Administration, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency. The Department contacted the permittee on April 6, 2021. The permittee waived the five-day proposed final applicant review in writing. The Department proceeded to issuance of the final permit consistent with 18 AAC 83.120(m).

1.3 Final Permit

The final permit was issued by the Department on April 8, 2021. There were no changes from the public noticed permit.