

**Department of Environmental Conservation  
Response to Comments**

**For**

**City of Valdez, Wastewater Treatment Facility**

**APDES Permit No. AK0021431**

**Public Noticed: December 16, 2020 – January 19, 2021**

**PROPOSED FINAL JANUARY 27, 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 Valdez Wastewater Treatment Facility (WWTF) is a publicly owned treatment works that treats domestic wastewater for the City of Valdez. The City of Valdez operates the Valdez WWTF.

Discharge Location: The wastewater discharge is transmitted through a marine outfall line to the Port of Valdez at: N 61° 6' 58.91" by W 146° 16' 50.66"

Description of Discharge: The wastewater effluent is secondary treated domestic wastewater that discharges at average daily flow rate of 1.02 million gallons per day. The main pollutants monitored in this wastestream are five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), fecal coliform bacteria, enterococci bacteria, pH, dissolved oxygen, total residual chlorine, total ammonia, total recoverable copper, total recoverable 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 a rectangle with a width of 87 feet and a length of 17 feet centered on the diffuser, from the seafloor to the surface. The chronic mixing zone is authorized for: total ammonia, dissolved oxygen, fecal coliform and enterococci bacteria, temperature, total residual chlorine, total recoverable copper, and Whole Effluent Toxicity (WET). The mixing zone size was driven by the dilution required for total ammonia. The dilution factor for the chronic mixing zone is 11.9. In addition, the acute mixing zone size is a rectangle with a width of 64 feet and a length of 10 feet centered on the diffuser, from the seafloor to the surface. The acute mixing zone size was driven by the dilution required for total recoverable copper. The dilution factor for the acute mixing zone is 2.4.

### **1.2 Opportunities for Public Participation**

The Alaska Department of Environmental Conservation (DEC and the Department) proposed to issue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit to the City of Valdez. 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/>
- notified potentially affected tribes and local government(s) that the Department would be working on this permit via letter, fax and/or email
- posted a preliminary draft of the permit on-line for a 10-day applicant review October 27, 2020 and notified tribes, local government(s) and other agencies
- formally published public notice of the draft permit on December 16, 2020 in *The Anchorage Daily News* and posted the public notice on the Department's public notice web page
- 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 comments from one interested party on the draft permit and supporting documents. Comments were submitted by Brad Koch, Utility Manager for the City of Valdez (City) and David Toomey, Environmental Technician for the City. The Department also requested comment from the Departments of Natural Resources, Fish and Game, National Oceanic and Atmospheric Association, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency (EPA).

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 minor changes from the public noticed permit. Changes are identified in the response to comments and reflected in the final fact sheet for the permit.

## **2 Comments on Monitoring Requirements Comment Summary**

The applicant requested that the temperature sampling frequency requirement in the draft permit be modified to twice weekly to match the sampling frequency requirement for dissolved oxygen, total residual chlorine, fecal coliform bacteria, and pH. This is a change from the once-weekly sampling frequency required for temperature in the previous permit.

### **Response:**

The Department concurs with the City's request and has changed the temperature monitoring frequency requirement to 2/Week in the permit (Table 2) and in the fact sheet (Table 3) and descriptions of temperature monitoring in the fact sheet in Part 3.3 and in Appendix A.

## **3 Comments on the Mixing Zone Comment Summary**

The applicant submitted a comment about the mixing zone indicating that their consultant, HDR, found some differences in Table 7, The Summary of DEC CORMIX Inputs, and what was emailed and what was provided to DEC in the City's Mixing Zone report. The draft shows the outfall pipe as 244 feet in length. The total length of the outfall pipe is 2,259 feet; 244 feet is the distance between the shoreline and the diffuser; the length used as a variable in CORMIX modeling. Also, the nearest bank should be – Right. That is the direction of the outflow where it turns 90 degrees and goes through the diffusers.

### **Response:**

The Department concurs with the City's suggestions and has adopted the changes to the outfall pipe length referenced in the fact sheet, including information from Figure 4: Valdez Wastewater Treatment Facility Chronic and Acute Mixing Zones and Table 7: Summary of DEC CORMIX Inputs. The outfall pipe length is changed from 244 feet to 2,259 feet in descriptions provided in the final fact sheet; clarifying that 244 feet is the distance from the shoreline to the diffuser, but the overall length of the outfall pipe is 2,259 feet. DEC has also changed the bank direction from Left to Right in Table 7.