EPA TECHNICAL REVIEW COMMENTS
Quarterly Progress Report No. 23-2
RCRA Post-Closure Permit No. AKD 04867 9682
Tesoro Alaska Company, LLC.
Kanai, Alaska
August 17, 2023

The US Environmental Protection Agency Region 10 (EPA) received electronically on June 5, 2023 the *Quarterly Progress Report No. 23-2 (February through April 2023), RCRA Post-Closure Permit No. AKD 04867 9682, Tesoro Alaska Company, LLC. Kanai, Alaska* (the QPR 23-2). The QPR 23-2 was prepared by Trihydro Corporation for Tesoro Alaska Company, LLC (Tesoro) and dated May 31, 2023.

EPA's comments on the QPR 23-2 are summarized in the general comments below and followed by specific comments.

GENERAL COMMENTS

The QPR 23-2 presents the spring quarter 2023 groundwater monitoring data. The comprehensive data analyses, including groundwater elevation contour maps and temporal distribution graphs for benzene as an indicator contaminant of concern (COC) are presented in the QPR 23-2. The data evaluation and discussions are generally acceptable to EPA. A few areas of concern are summarized in the following bullets and discussed in the specific comments below.

- The new monitoring well south of E-072RR must be installed before the winter 2023 sampling event.
- Injection well replacement and rehabilitation tasks must be discussed in the upcoming activities sections.
- R-21R recovery well piping reconfiguration must be completed as soon as possible. If feasible, R-21R should be brought online before 2024.

- Localized benzene plume around E-160 and E-171 must be closely monitored. EPA recommends a few additional monitoring wells be sampled in the next few quarters in additional to the two proposed downgradient monitoring wells.

- Additional pumping operation data must be collected for the industry water supply wells Unocal-5/6 to further evaluate benzene detections and concentration variations in well E-147 of the Upper Confined Aquifer (UCA).

SPECIFIC COMMENTS

1. Page 3-4, Section 3.4.2:

It is not clear why R-21R piping reconfiguration cannot be completed before 2024. Continuous R-21R shutdown would allow more benzene flux to migrate downgradient and increase the contaminant loading to the downgradient air-sparge treatment and recovery wells R40/41 and R-56 in the PRM area. EPA strongly recommends that R-21R be brought online before the beginning of 2024.

2. Page 4-2, Section 4.3, last paragraph and continued on page 4-3:

The detection of benzene concentrations exceeding the benzene cleanup criterion at E-160 and E-171 appears to indicate a localized benzene plume around the two wells in the area. This "orphan" benzene plume must be closely monitored during next few quarters sampling events. Well pair E-137A/B, to the north (cross-gradient) of well E160, must also be sampled in Q23-3.

3. Page 4-5, Section 4.7:

For upcoming activities for B-aquifer, E-171 and E-137A/B must also be sampled in Q23-3 in addition to wells E-160, E-155, and E-156 to evaluate the "orphan" benzene plume area around E-160 and E-171.

4. Page 5-1, Section 5.3:

EPA agrees that well E-147 should be monitored on a quarterly basis to evaluate the change in benzene concentrations and determine if further action is required for the UCA. Well E-147 is located in the vicinity of industrial water supply wells Unocal-5/6; pumping drawdown from Unocal 5/6 may increase groundwater leakage from the overlying unconfined aquifer. The pumping operational data (pumping rates and operation on/off schedule) for Unocal-5/6 must be collected during the current quarter to evaluate the potential relationship between the benzene concentration variations in E-147 and the water supply well pumping.