

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

43335 Kalifornsky Beach Road, Suite 11 Soldotna, Alaska 99669 Main: 907-262-5210 Fax: 907-262-2294 www.dec.alaska.gov

File: 2337.38.007

June 23, 2023

Jason C. Michelson Operations Lead - Central Chevron Environmental Management Company 1500 Louisiana Street, Floor 38 Houston, Texas 77002

Re: Trading Bay Facility

Hazard ID: 1263

2023 Requirement for Workplan

Mr. Michelson,

The Department of Environmental Conservation (DEC) Contaminated Sites Program has reviewed the Hilcorp response to the Department of Environmental Conservation - Trading Bay Piping Leak - Request for Work Plan reply dated April 14, 2023. Communications are available on DEC's Contaminated Sites web page under the Trading Bay Facility (2337.38.007). DEC has the following response:

DEC has requested a work plan for subsurface investigation at the Trading Bay Facility to address three areas of concern. The Hilcorp Trading Bay Line Release W-0534 (2337.38.05) was a release of crude oil due to pipe corrosion for an unknown time. 174 cubic yards of soil were excavated. DEC is requiring a subsurface investigation to measure the extent of crude oil contamination in the area of the release. The goal is to determine if source area product is present on the groundwater; and if recovery is possible.

Hilcorp Trading Bay Piping Leak (2337.38.052) was a pipeline leak adjacent to the sand filter that released produced fluid and crude oil. 60 cubic yards of impacted soil was excavated. DEC is requiring a subsurface investigation to determine the extent of crude oil contamination in the area of the release and if product recovery is possible in the source area.

DEC has reviewed site conditions and determined that there are groundwater and product distribution data gaps within the facility that may be missing source area NAPL and potentially ongoing leaks that are contributing to product accumulation at the bluff and offsite to the beach. Hilcorp has rejected the States requirement for investigation. Under Alaska's joint and several liability laws we are holding Chevron and Hilcorp jointly liable for site investigation work.

Hilcorp has argued that the remediation system is controlling impacts to the beach. This is not a valid argument against investigation or determining if ongoing impacts exist. Product has migrated to the beach causing impacts, violating the Compliance Order by Consent and surpassing the compliance point of the blufftop.

Forty years of historical assessment and monitoring work including the most recent site reports show no discernable source attenuation of product on the groundwater near the bluff. Prior to the start of the remediation system, NAPL product accumulation in M-111, RW-2 and M-102D, and increasing benzene concentrations in the northern beach wells have been documented. Product accumulation in RW-7 while the remediation system is in operation points to the possibility that recent releases are impacting the bluff groundwater.

Our approximate area of concern is between M-8, M-102, RW-1 and GA-MW-2 for a source of product that is manifested on the bluff and the north beach. This area lacks monitoring points between GAMW-3, D-MW-1 and M-102 where benzene and NAPL concentrations can be measured. Additional information in this area may change the understanding of contaminant distribution.

We are requesting a review of the history of NAPL and Benzene distribution and submittal of a work plan to characterize the vertical distribution of contamination and identify possible areas with ongoing sources by installing monitoring wells to fill data gaps in the monitoring network. Consider continuous sampling and optical image profiling technology. Use existing leak detection systems and data and knowledge of components of the regulated system to inform the requested workplan and report. Evaluate the aquitard when encountered for transmissivity and continuity, as historical reports referred to a lower aquifer, where modern reports refer to a silty stratum with preferential pathways or barriers that can alter the movement of groundwater NAPL.

Hilcorp has argued that three wells, M-111, RW-2, and M-102D show decreasing trends of product thickness, failing to acknowledge that wells are influenced by the remediation recovery system. Citing that there are decreasing trends of contamination in recovery wells does not negate the possibility of additional source areas.

Hilcorp has sited that the two spill sites, Trading Bay Line Release W-0534 (2337.38.05), and Trading Bay Piping Leak (2337.38.052) had cleanup actions under the Spill Response Program. Those cleanup actions do not exempt the responsible party from further investigation, assessment and remediation under the Contaminated Sites regulations.

Hilcorp states, "The recovery well system has successfully prevented significant quantities of benzene from reaching the beach and operation should continue." The recovery wells are becoming fouled over time. Recovery rates are diminishing and cannot be expected to remain at peak recovery flow indefinitely. DEC also assumes that the permeable reactive barrier will become saturated over time and become less effective. These are additional reasons to address source area impacts.

Hilcorp states, "Additional investigation within the active area will not provide information that can be acted on at the present time." DEC disagrees with this statement. Assessment of a known release is a requirement under Alaska law. Installation of monitoring and/or recovery wells is an obligation. Technology and safety systems are in place to allow construction and investigation.

To aid in our understanding of site conditions, please provide a comprehensive set of drill logs to DEC. A map showing all historical drilling locations would be helpful but not required.

Submit a work plan for site investigation by August 30, 2023. If you have questions about this letter, or any other aspect of this project, please contact me at (907) 262-3412, or by e-mail at peter.campbell@alaska.gov

Sincerely,

Peter Campbell Environmental Program Specialist

Cc: Craig Wilson, Stantec Drew Anderson, Hilcorp