

## Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

> 43335 Kalifornsky Beach Rd., Ste. 11 Soldotna, Alaska, 99669 Main: 907.262.5210 Fax: 907.262.2294 www.dec.alaska.gov

> > File: 2337.38.052

January 18, 2023

Drew Anderson Hilcorp Alaska, LLC. 3800 Centerpoint Drive, Suite 1400 Anchorage AK 99503

Re: Hilcorp Trading Bay Piping Leak

Hazard ID: 27671 Request for Work Plan

Mr. Anderson,

The Alaska Department of Environmental Conservation (DEC), Contaminated Sites Program has reviewed the the historical record for the Trading Bay Production Facility, and has concluded that the long term accumulation of non aqueous phase liquids (NAPL) at the site may be indicative of an ongoing release of crude oil from an undefined source.

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. NAPL product accumulation in M-111, RW-2 and M-102D, and increasing benzene concentrations in the northern beach wells have been documented. One common issue with these concentrations is that most of the NAPL appears to be below the aquitard. When recovery well RW-2 was drilled, product was present above the aquitard, and RW-1 had elevated PID concentrations relatively shallow to the water table, more than other recovery wells.<sup>1</sup> These factors may be relevant to understanding current site conditions.

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. We are requesting that Hilcorp review the history of NAPL and Benzene distribution and submit a work plan to characterize the vertical distribution of contamination and identify possible areas with ongoing sources by installing

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monitoring wells to fill data gaps in the monitoring network. Hilcorp should consider continuous sampling and optical image profiling technology. Hilcorp should utilize existing leak detection systems and data and knowledge of components of the regulated system to inform the requested workplan and report. Hilcorp should evaluate the aquitard where encountered for transmissivity and continuity, as historical reports referred to a lower aquifer, where modern reports refer to a silty strada with preferential pathways or barriers that can alter the movement of groundwater NAPL.

DEC has requested work plans from the Hilcorp Trading Bay Line Release W-0534 (2337.38.054) and Hilcorp Trading Bay Piping Leak (23337.38.052). Both of these releases had the potential to impact groundwater. This subsurface investigation should incorporate findings from known releases along with historical and current environmental work conducted by Chevron to help determine if there are active impacts to groundwater.

Please submit a work plan to our office by March 1, 2023. If you have specific questions regarding this site, you can reach me by email at <a href="mailto:peter.campbell@alaska.gov">peter.campbell@alaska.gov</a>.

Sincerely,

Peter Campbell Project Manager

Peter Campbell

**ADEC Contaminated Sites Program** 

<sup>&</sup>lt;sup>1</sup> 2021 Report for Trading Bay indicates that product levels are increasing at M-111 since 2019, and benzene concentrations are increasing at the beach wells (PRB). M-111 product thickness are within historical ranges, recent increasing variations could be from decreased pumping well efficiency. 2018 Report (6/3/19) has cross sections. RW-2 depicts a smear zone above the aquitard. All other product *appears* to be below the aquitard.