UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Agency Name: Orange County Health Care Agency Division of Environmental Health	Address: 1241 East Dyer Road, Suite 120 Santa Ana, CA 92705
Agency Caseworker: Geniece Higgins	Case No.: 01UT001

Case Information

UST Cleanup Fund (Fund) Claim No.: NA	Global ID: T060594895
Site Name: ARCO #5831	Site Address: 24181 Moulton Parkway Laguna Woods, CA 92653 (Site)
Responsible Party: Marathon Petroleum Company, LP Attention: Eric Swaisgood	Address: 539 South Main Street Findlay, Ohio 45840
Fund Expenditures to Date: NA	Number of Years Case Open: 22

GeoTracker Case Record: http://geotracker.waterboards.ca.gov/?gid=T060594895

Summary

This case has been proposed for closure by the State Water Resources Control Board at the request of the Orange County Health Care Agency (County), which concurs with closure.

The Low-Threat Underground Storage Tank Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy because they pose a low threat to human health, safety, and the environment. The Site meets all of the required criteria of the Policy and therefore, is subject to closure.

The Site is an active commercial fueling facility. The release from the underground storage tank (UST) system was reported January 2001 following the removal and replacement of the pipelines and dispensers associated with the UST system. Soil samples collected after the pipeline and dispenser replacement indicate secondary

source was effectively removed during the replacement activities and that the direct contact media-specific criteria have been met. In 2009, the responsible party proposed monitored natural attenuation assisted by phytoremediation based on the decline of dissolved concentrations of the methyl tertiary butyl ether (MTBE). Data indicated that concentration reduction was being enhanced by uptake of contaminants by the root system of existing eucalyptus trees located on the Site. MTBE concentrations have been reduced from a high of 31,000 micrograms per liter (µg/L) and are now significantly less than the 1,000 µg/L threshold listed in order to meet the groundwater media-specific criteria of the Policy. The furthest downgradient concentration of MTBE is sufficiently low to project the approximate plume length of MTBE exceeding water quality objectives. The projected plume length, along with the lack of sensitive receptors in the vicinity of the Site, demonstrates that the plume has met the groundwater criteria.

Remaining petroleum constituents are limited, stable, and decreasing. Additional assessment would be unnecessary and will not likely change the conceptual model. Any remaining petroleum constituents do not pose significant risk to human health, safety, or the environment under current conditions.

The site is being closed under the active fueling facility exception for vapor intrusion to indoor air. Additionally, mass was removed from the site via phytoremediation using the onsite eucalyptus trees. It is unknown how subsurface conditions will change if the eucalyptus trees are removed. If the trees are removed or the Site use changes from an active fueling facility, the case should be reevaluated to ensure protection of human health.

Rationale for Closure Under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy.
- Groundwater Media-Specific Criteria – Site **meets the criteria in Class 4**. The contaminant plume that exceeds water quality objectives is less than 1,000 feet in length. There is no free product. The nearest existing water supply well or surface water body is greater than 1,000 feet from the plume boundary. The dissolved concentration of benzene is less than 1,000 micrograms per liter (µg/L), and the dissolved concentration of MTBE is less than 1,000 µg/L.
- Petroleum Vapor Intrusion to Indoor Air – Site **meets the EXCEPTION** for vapor intrusion to indoor air. Exposure to petroleum vapors associated with historical fuel system releases are comparatively insignificant relative to exposures from small surface spills and fugitive vapor releases that typically occur at active fueling facilities.
- Direct Contact and Outdoor Air Exposure – Site **meets Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, and the environment. The corrective action performed at this Site is consistent with chapter 6.7 of division 20 of the Health and Safety Code, implementing regulations, applicable state policies for water quality control and applicable water quality control plans. Case closure is recommended.

Prepared by:

William E. Brasher
Water Resource Control Engineer

2/13/2023
Date

Reviewed By:

Matthew Cohen, P.G. No. 9077
Senior Engineering Geologist

2/13/2023
Date