UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Agency Name: Los Angeles Regional Water Quality Control Board (Los Angeles Water Board)	Address: 320 West 4th Street, Suite 200 Los Angeles, CA 90013
Agency Caseworker: Noman Chowdhury	Case No.: I-04980

Case Information

UST Cleanup Fund (Fund) Claim No.: N/A	Global ID: T0603703013
Site Name: G&M Oil Company Station #66	Site Address: 11770 East Washington Boulevard Santa Fe Springs, CA 90606 (Site)
Responsible Party: G&M Oil Co. Attention: Ms. Liz Goff	Address: 16868 A Street Huntington Beach, CA 92647
Fund Expenditures to Date: N/A	Number of Years Case Open: 28

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703013

Summary

This case has been proposed for closure by the State Water Resources Control Board at the request of the Los Angeles Regional Water Quality Control Board, 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. This case meets all of the required criteria of the Policy.

The Site currently operates as a retail fueling facility in the city of Santa Fe Springs. Soil borings advanced during an October 1990 annual inspection revealed a potential release in the vicinity of the USTs. After further investigation, three gasoline, two diesel, and one waste oil USTs were removed from the Site in 1998. A soil vapor extraction (SVE) system operated onsite from 2004 to 2014, removing a reported 79,859 pounds of petroleum hydrocarbons. A groundwater treatment system was used concurrently with the SVE system from 2006 until 2014, extracting, treating, and discharging a reported total of 1,247,800 gallons of impacted groundwater. Approximately 47 gallons of free product was bailed from one monitoring well in 2005. Elevated levels of total petroleum hydrocarbons (TPH) were encountered in soil borings from 2004, before soil vapor extraction was implemented.

Residual petroleum constituents at this Site pose low threat via direct contact, vapor intrusion, and groundwater-specific pathways. Soil borings advanced in 2004 indicate concentrations of

petroleum constituents exist below laboratory detection limits at depths of less than 10 feet below ground surface (bgs). These borings also indicated elevated TPH levels at depths of 30 feet bgs. However, due to the subsequent mass removal of petroleum hydrocarbons via the SVE system and the previously identified 25 feet of unimpacted soil, the site is considered to pose low risk to human health and the environment. Recent groundwater monitoring indicates the benzene plume exceeding water quality objectives (WQOs) exists at a length of greater than 200 feet; however, based on current benzene concentrations in groundwater, it is like that concentrations attenuate below WQO levels well before 1,000 feet. Although benzene has only been detected in one groundwater sample since April 2013, the recently identified plume exhibits a general decreasing trend compared to historical benzene concentrations detected at the Site.

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.

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 defined plume boundary. The dissolved concentration of benzene is less than 1,000 micrograms per liter (µg/L), and the dissolved concentration of methyl-tert butyl ether is less than 1,000 µg/L.
- Petroleum Vapor Intrusion to Indoor Air – Site meets **Criteria 2 (b)**. A Site–specific risk assessment for the vapor intrusion pathway was conducted under the policy and demonstrates that human health is protected to the satisfaction of the regulatory agency.
- 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.

  There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2% benzene and 0.25% naphthalene. Therefore, benzene concentrations can be used as a surrogate for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Table 1 of the Policy. Therefore, estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact with a safety factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, 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.

Matthew Cohen, PG No. 9077
Senior Engineering Geologist

4/8/19
Date