

State Water Resources Control Board

REVIEW SUMMARY REPORT – CONCUR FIFTH REVIEW – SEPTEMBER 2016

Agency Information

Agency Name: Central Valley Regional Water Quality Control Board (Regional Water Board)	Address: 11020 Sun Center Drive, #200 Rancho Cordova, CA 95670
Agency Caseworker: Christopher Flower	Case No.: 550076

Case Information

USTCF Claim No.: 7049	GeoTracker Global ID: T0610900056
Site Name: Lawrence Enterprises	Site Address: 20743 Longeway Road Sonora, CA 95370
Responsible Party: Merrie Whipple	Address: PO Box 943 Soulsbyville, CA 95372
USTCF Expenditures to Date: \$1,164,992	Number of Years Case Open: 24
Fund Budget Category: VM – Verification Monitoring	

To view all public documents for this case available on GeoTracker use the following URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0610900056

Summary

The Low-Threat Underground Storage Tank (UST) 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. Highlights of the case follow:

This case is a former commercial petroleum fueling facility. Other than two unoccupied wooden buildings, the property is a vacant lot. An unauthorized release was reported in July 1992 following the removal of three gasoline USTs. Reportedly 1,300 cubic yards of contaminated soil were excavated to a depth of 17 feet below ground surface (bgs) and disposed offsite in 1992. Approximately 1,600 cubic yards of impacted soil were excavated to a depth of 15 feet bgs and disposed offsite in October 2007. Approximately 3,180 cubic yards of impacted soil were excavated to a depth of 11 feet bgs and disposed offsite between November 2010 and February 2011. No other remediation has been conducted. Since 1993, ten groundwater monitoring wells have been installed and irregularly monitored; three wells have been abandoned. According to groundwater data, water quality objectives have been achieved for all constituents, with the exception of 1,2-dichloroethane (1,2-DCA) in two monitoring wells.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no public water supply wells or surface water bodies within 1,000 feet of the defined plume boundary. According to GeoTracker there are no nearby or impacted wells. Three domestic water supply wells have been identified within 1,000 feet south (crossgradient) of the defined plume boundary in files reviewed. According to GeoTracker there are no nearby or

impacted water supply wells. The unauthorized release is located within the service area of a public water system, as defined in the Policy. The affected shallow groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected shallow groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of the affected shallow groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting. Remaining petroleum hydrocarbon constituents are limited and stable, and concentrations are decreasing. Corrective actions have been implemented and additional corrective actions are not necessary. Any remaining petroleum hydrocarbon constituents do not pose a significant risk to human health, safety or the environment.

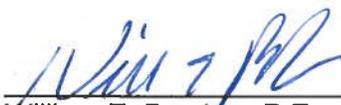
Rationale for Closure under the Policy

- **General Criteria:** The case meets all eight Policy general criteria.
- **Groundwater Specific Criteria:** The case meets Policy Criterion 1 by Class 5. Three domestic water supply wells have been identified within 1,000 feet of the defined plume boundary, the nearest of which is located south (crossgradient) approximately 800 feet from the edge of the defined 1,2-DCA plume. The remaining 1,2-DCA plume is stable and defined, with concentrations sufficiently low such that it will not threaten the domestic wells. Otherwise, the case meets Policy Criterion 1 by Class 2. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. There is no free product. The dissolved concentration of benzene is less than 3,000 micrograms per liter ($\mu\text{g/L}$), and the dissolved concentration of methyl tertiary butyl ether (MTBE) is less than 1,000 $\mu\text{g/L}$.
- **Vapor Intrusion to Indoor Air:** The case meets Policy Criterion 2a by Scenario 4 with a bioattenuation zone. The maximum benzene, ethylbenzene, and naphthalene concentrations in soil gas are less than 280,000 micrograms per cubic meter ($\mu\text{g/m}^3$), 3,600,000 $\mu\text{g/m}^3$, and 310,000 $\mu\text{g/m}^3$, respectively, at a depth of five feet. These levels meet the soil gas criteria where the soil gas sample locations are overlain by soil containing less than 100 mg/kg of total petroleum hydrocarbons where the oxygen soil vapor concentration is equal to or greater than 4 percent.
- **Direct Contact and Outdoor Air Exposure:** This case meets Policy Criterion 3b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to residual soil contamination was completed by Fund staff. The results of the assessment found that maximum concentrations of petroleum constituents remaining in soil will have no significant risk of adversely affecting human health. Over 6,000 cubic yards of soil from the source area(s) of the site have been removed and replaced with clean fill during three excavation events (1992, 2007, and 2011). The depths of the excavations ranged from 11 to 17 feet in depth and covered almost the entire area encompassing the hydrocarbon soil source, leaving only the inaccessible residual impacts along the perimeters of the excavated areas. Soil from each of the excavated areas was replaced with clean fill after each of the three excavation events.

Agency Communication

In an electronic mail sent to State Water Board staff on August 26, 2016, Regional Water Board staff indicated their intention to initiate the closure process for this case. State Water Board staff concur with Regional Water Board staff's plan to initiate the closure process.

The recommended Fund budget category for this claim is: SC – Site Closure.



William E. Brasher, P.E. 9/20/16 Date
Water Resource Control Engineer
Technical Review Unit
(916) 341-5663



Pat G. Cullen, P.G. 9/20/16 Date
Senior Engineering Geologist
Chief, Technical Review Unit
(916) 341-5684

