

State Water Resources Control Board

REVISED REVIEW SUMMARY REPORT – CONCUR FIFTH REVIEW – FEBRUARY 2016

Agency Information

Agency Name: Sacramento County Environmental Management Division (County)	Address: 10590 Armstrong Avenue, Ste A Mather, CA 95655
Agency Caseworker: Sue Erikson	Case No.: G003

Case Information

USTCF Claim No.: 17170	GeoTracker Global ID: T0606792019
Site Name: Former Painted Lady Antiques	Site Address: 3331 Folsom Boulevard Sacramento, CA 95816
Responsible Party: Gary and Linda Nibbelink	Address: Private Address
USTCF Expenditures to Date: \$644,622	Number of Years Case Open: 13

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=T0606792019

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, however, additional work is recommended. Highlights of the case follow:

This Site is a business and former commercial petroleum fueling facility. An unauthorized release was reported in February 2002 following the removal of three gasoline USTs. An unknown volume of contaminated soil was excavated to a depth of 8 feet below ground surface (bgs) and disposed offsite. A dual-phase extraction pilot test was conducted in February 2007 which removed 47 pounds of total petroleum hydrocarbons as gasoline (TPHg) and 19,608 gallons of contaminated groundwater. Oxygen sparging was conducted between April 2011 and June 2014. Since 2003, eight groundwater monitoring wells have been installed and monitored. According to groundwater data, water quality objectives have been achieved or nearly achieved for all constituents except in the source area.

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 250 feet of the defined plume boundary. No other water supply wells have been identified within 250 feet of the defined plume boundary in files reviewed. 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.

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 1. The contaminant plume that exceeds water quality objectives is less than 100 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary. However, petroleum hydrocarbon concentrations in groundwater in the source area show post-remediation rebound.
- **Vapor Intrusion to Indoor Air:** The case meets Policy Criterion 2a by Scenario 3a. The maximum benzene concentration in groundwater is less than 100 micrograms per liter ($\mu\text{g/L}$). The minimum depth to groundwater is greater than 5 feet, overlain by soil containing less than 100 milligrams per kilogram (mg/kg) of TPH.
- **Direct Contact and Outdoor Air Exposure:** The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. 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 percent benzene and 0.25 percent naphthalene. Therefore, benzene 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 Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Agency Communications

In a phone conference on February 3, 2016, between State Water Board staff and County staff, State Water Board staff agreed that post-remediation rebound of petroleum hydrocarbon concentrations had occurred in the source area. Although the Site still meets the criteria for closure, due to the shallow depth to groundwater the rebound concentrations could potentially create a risk for vapor intrusion. State Water Board staff and County staff discussed focused limited remediation in the source area, using contractors with expertise in high vacuum dual phase extraction. State Water Board staff specifically expressed the need to dewater the area of well MW-1 to effectively remediate the compliance point. In addition to vapor sampling and pre- and post-remediation test groundwater sampling, quarterly sampling of groundwater wells MW-1, MW-2, MW-3 and MW-7 for two quarters is recommended.

Recommendation

State Water Board staff concurs with County staff to direct the Responsible Party to conduct focused, limited-duration groundwater remediation at monitoring well MW-1. State Water Board staff also concurs with quarterly post-remediation sampling of key wells for two quarters to evaluate for rebound.

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