

State Water Resources Control Board

REVISED REVIEW SUMMARY REPORT – ADDITIONAL WORK SECOND REVIEW – AUGUST 2015

Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Regional Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501
Agency Caseworker: Rose Scott	Case No.: 083303703T

Case Information

USTCF Claim No.: 15419	GeoTracker Global ID: T0606599142
Site Name: Gas 4 Less	Site Address: 22144 Alessandro Blvd. Moreno Valley, CA 92553
Responsible Party: Dick Miller	Address: Private Address
USTCF Expenditures to Date: \$1,175,713	Number of Years Case Open: 15

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=T0606599142

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 parking lot and former commercial petroleum fueling facility. An unauthorized release was reported in September 1999 following the removal of four USTs (three gasoline, one waste oil) and an unknown volume of contaminated soil was removed. Soil vapor extraction and air sparging were conducted between July 2008 and March 2015, which removed 2,786 pounds of total petroleum hydrocarbons as gasoline (TPHg). Since 2005, 13 groundwater monitoring wells have been installed and monitored. According to groundwater data, water quality objectives have been achieved or nearly achieved 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 1,000 feet of the defined plume boundary. No other water supply wells have been identified within 1,000 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. 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

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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 2. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. There is no free product. The nearest 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 3,000 micrograms per liter ($\mu\text{g/L}$) and the dissolved concentration of methyl tert-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 3b. The maximum benzene concentration in groundwater is less than 1,000 $\mu\text{g/L}$. The minimum depth to groundwater is greater than 10 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.

Unique Attributes

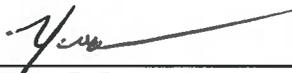
The Policy recognizes that some petroleum release sites may pose unique attributes and that some site specific conditions may make case closure under the Policy inappropriate, despite the satisfaction of the stated criteria in the Policy. The (Regulatory Agency) and State Water Board staff agreed that this case should address the following site specific conditions that require specific attention prior to the application of Low-Threat Closure criteria.

- Despite ongoing active remediation and plumes that are decreasing in areal extent, elevated dissolved MTBE and TBA concentrations persist in wells MW-1 and MW-2. Perform rebound test to determine the effectiveness of groundwater remediation to date.

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Recommendation

The Fund recommends that the County direct the Responsible Party to shut down the air sparge soil vapor extraction remediation system for 6 months to allow groundwater elevations to equilibrate; in addition semiannual groundwater sampling is recommended to obtain rebound test data. Confirmation soil sampling in the source area is also recommended. After these activities have been completed, reevaluate the case for closure.



Kirk Larson, P.G.
Engineering Geologist
Technical Review Unit
(916) 341-5663

8/13/15
Date



Robert Trommer, C.H.G.
Senior Engineering Geologist
Chief, Technical Review Unit
(916) 341-5684

8/13/15
Date