



State Water Resources Control Board

REVIEW SUMMARY REPORT – ADDITIONAL WORK
SECOND REVIEW – DECEMBER 2014

Agency Information

Table with 2 columns: Agency Name, Address, Agency Caseworker, Case No.

Case Information

Table with 2 columns: USTCF Claim No., Site Name, Responsible Party, USTCF Expenditures to Date, GeoTracker Global ID, Site Address, Address, Number of Years Case Open

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=T0603702176

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 does not meet all of the required criteria of the Policy. Highlights of the case follow:

This case is an active commercial petroleum fueling facility. An unauthorized release was reported in May 1991. Five USTs were removed in February 2008 and approximately 677 tons of impacted soil were excavated and disposed offsite. Soil vapor extraction was conducted between July 1999 and December 2004 and between May 2007 and April 2012, which reportedly removed 233,218 pounds of total petroleum hydrocarbons as gasoline (TPHg). Since 2011, four groundwater monitoring wells have been installed and regularly monitored.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no supply wells or surface water bodies within 1,000 feet of the Site. No other water supply wells have been identified within 1,000 feet of the Site 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 does not meet Policy criteria for groundwater because the methyl tert-butyl ether (MTBE) plume is not stable or decreasing.
- Vapor Intrusion to Indoor Air: The site property associated with the case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because the Site is an active commercial petroleum fueling facility and the release characteristics do not pose an unacceptable health risk. The off-site properties associated with the case meet the Policy Criterion 2a by Scenario 1. The minimum distance between the groundwater containing greater than 1,000 µg/L benzene and all existing or potential buildings is greater than 30 feet, and the intervening soil contains less than 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (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 directly substituted 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.

Objections to Closure and Responses

According to the letter dated August 27, 2014, the Regional Water Board opposes closure because:

- Residual concentrations of benzene, MTBE, and TBA could pose an imminent threat to human health and safety and to the environment and water quality objectives.

RESPONSE: Agreed. The case does not meet Policy criteria for groundwater because the MTBE plume is not stable or decreasing.

Recommendation

The State Board recommends that the Regional Water Board issue a directive for a Remedial Action Plan to address the groundwater contamination, and for continued groundwater monitoring.

 12-17-14
Date

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 12/17/14
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