

State Water Resources Control Board

REVIEW SUMMARY REPORT – ADDITIONAL WORK FOURTH REVIEW – AUGUST 2015

Agency Information

Agency Name: San Diego Regional Water Quality Control Board (Regional Water Board)	Address: 2375 Northside Drive, Suite 100 San Diego, CA 92108-2700
Agency Caseworker: Sean McClain	Case No.: 9UT3979

Case Information

USTCF Claim No.: 15213	GeoTracker Global ID: T0607399197
Site Name: Pala Vista Gas Station	Site Address: 29200 Valley Center Road Valley Center, CA 92082
Responsible Party: Key Lee	Address: Private residence
USTCF Expenditures to Date: \$1,475,529	Number of Years Case Open: 16

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=T0607399197

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 August 1999 following the removal of two gasoline USTs. An unknown volume of impacted soil was removed during the UST removal and disposed offsite. In addition, approximately 125 tons of impacted soils from the source area were excavated and disposed offsite in 2006. Groundwater treatment consisting of extraction of groundwater, above ground carbon adsorption treatment and reinjection of the treated groundwater into the subsurface, was conducted between 2006 and 2013. Since 2000, twenty- six groundwater monitoring wells have been installed and irregularly monitored. According to available groundwater data, water quality objectives have not been achieved.

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. Four private domestic water supply wells have been identified within 250 feet and downgradient of the defined plume boundary in files reviewed. Presently, one of the domestic wells is impacted with methyl tertiary-butyl ether (MTBE), while the remaining three wells could potentially be impacted in the future. The unauthorized release is located within the service area of a public water system, as defined in the Policy.

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Rationale for Closure under the Policy

- **General Criteria:** The case meets all eight Policy general criteria.
- **Groundwater Specific Criteria:** The case does not meet the Policy criteria because the contaminant plume is more than 250 feet long, the maximum dissolved concentrations of benzene and methyl tertiary butyl ether (MTBE) are each more than 1,000 µg/L and there are private water supply wells within 250 feet of the defined plume boundary.
- **Vapor Intrusion to Indoor Air:** Onsite, the case meets the Active Commercial Petroleum Facility Exception. Exposure to petroleum vapors associated with historical fuel system releases is comparatively insignificant relative to exposures from small surface spills and fugitive vapor releases that typically occur at active fueling facilities. Off-site properties associated with the case meet Policy Criterion 2a by Scenario 3a. The maximum benzene concentration in groundwater offsite is less than 100 µg/L. The minimum depth to groundwater is greater than 5 feet, overlain by soil containing less than 100 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 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.

Objections to Closure and Responses

The Regional Water Board objects to UST case closure (Regional Water Board staff email dated June 9, 2015 to Responsible Party's consultant) because:

- **Secondary source has not been removed to the extent practicable.**
RESPONSE: Secondary source, as defined by the Policy, has been removed through the excavation of soils during the UST removal and through additional excavation of the source area in 2006.
- **The dissolved contaminant plume does not meet the groundwater specific criteria.**
RESPONSE: State Water Board staff concurs.

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Recommendation

The State Water Board recommends that the Regional Board direct the Responsible Party to

- Abate the MTBE contamination in the impacted domestic well. Options may include but are not limited to well head treatment or replacement of the well.
- Consider the use of other cost-effective remedial options for the MTBE plume. The chosen remedy should ensure that there is no future threat to the downgradient wells and other receptors.

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8/27/15

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