

State Water Resources Control Board

UST CASE CLOSURE REVIEW SUMMARY REPORT

Agency Information

Agency Name: Central Valley Regional Water Quality Control Board, Fresno (Regional Water Board)	Address: 685 E Street Fresno, CA 93706-2020
Agency Caseworker: John Whiting	Case No.: 5T15000892

Case Information

USTCF Claim No.: 18480	GeoTracker Global ID: T0602912732
Site Name: Fast Lane Mini Mart	Site Address: 201 Elmo Highway McFarland, CA 93250
Responsible Party: Fast Lane Mini Mart Attn: Harbans Singh Grewal	Address: 201 Elmo Highway McFarland, CA 93250
USTCF Expenditures to Date: \$588,956	Number of Years Case Open: 11

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=T0602912732

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 an active commercial petroleum fueling facility. An unauthorized release was reported in April 2004 following the removal and replacement of three USTs (two gasoline, one diesel). Unknown volume of contaminated soil was excavated to a total depth of 10 feet in 2004. Soil vapor extraction and air sparging were conducted between February 2010 and February 2013 for a total of 19,024 hours, which reportedly removed 20,343 pounds of total petroleum hydrocarbons as gasoline (TPHg). Since 2008, ten groundwater monitoring wells have been installed and monitored. Since 2009 there have been no detections of petroleum hydrocarbons above WQOs and prior to that, only sporadic detections of various petroleum constituents slightly above WQO's. According to groundwater data, water quality objectives have been achieved for all constituents.

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 location served by public water supply, as defined by the Policy. The affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of impacted groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting. Remaining

Fast Lane Mini Mart
201 Elmo Highway, McFarland
Claim No: 18480

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 1. This class is being used because there is no plume that remains beneath the Site and has not had detections of petroleum hydrocarbons in any Site monitoring well above WQOs since 2009.
- Vapor Intrusion to Indoor Air: The case meets the Policy Exclusion for an Active Commercial Petroleum Fueling Facility. 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.
- 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 found that maximum concentrations of petroleum constituents remaining in soil will have no significant risk of adversely affecting human health. Excavation was conducted beneath the former USTs to a depth of 10 feet and replaced with clean fill. The Site is paved and accidental exposure to site soils is prevented. Any construction crew performing subsurface work will be prepared to deal appropriately with environmental hazards anticipated or encountered in their normal daily work. The presence of residual contamination should be taken into account when issuing and executing excavation or building or other permits at the Site, including but not limited to the inclusion of a Competent Person in the work crew.

Determination

The Fund Manager has determined that corrective action performed at the Site is consistent with the requirements of Health and Safety code section 25296.10, subdivision (a), and that closure of the case is appropriate.

Recommendation for Closure

Based on available information, residual petroleum hydrocarbons at the Site do not pose a significant risk to human health, safety, or the environment, and the case meets the requirements of the Policy. Accordingly, the Fund Manager recommends that the case be closed. The State Water Board is conducting public notification as required by the Policy. Kern County has the regulatory responsibility to supervise the abandonment of monitoring wells.

Lisa Babcock
Lisa Babcock, P.G. 3939, C.E.G. 1235

7/6/15
Date

Prepared by: Kirk Larson, P.G.

**Response to Regional Water Board Comments Regarding Closure of
Fast Lane Mini Mart Located at 201 Elmo Highway, McFarland,
Memorandum dated February 10, 2014
Claim 18480**

In an email dated July 28, 2014 the Regional Water Board staff declined participating in a conference call to discuss their concerns regarding closure of this case. "Our objections to the closure are presented in a Memorandum dated February 10, 2014 and have been incorporated into the RSR."

Comment 1. The professional health-risk assessment referred to is not part of the case file. A report signed by a registered professional evaluating the site-specific health risk from the potential exposure to residual soil contamination based on historical information is not part of the case record, supporting documentation and data is lacking, the professional who performed the assessment is not disclosed.

Response 1. A professional assessment of site-specific risk from potential exposure to residual soil contamination was performed. This assessment was performed by UST Cleanup Fund Staff. The basis for the conclusion that Policy Criterion 3b is met is that soil was excavated to a depth of 10 feet in the areas of the USTs, soil vapor extraction and air sparging remediation have occurred, the site is paved, and any construction worker will be prepared for an exposure in their normal daily work.

Comment 2. Excavation to more than 10 feet bgs is documented for the 2004 removal of the USTs, but impacted soil beneath the dispensers was removed to approximately two to three feet bgs, according to geologic cross sections included in the case file. Shallow soils beneath the dispenser island are characterized as silt in the cross sections, a soil less permeable than sand that could have retained gasoline constituents after soil vapor extraction and air sparging remediation from 2010 through 2012.

Response 2. Soil vapor extraction and air sparging remediation took place between 2010 and 2013, groundwater has not been impacted requested and first groundwater is at 129 feet bgs. The site is paved, thus preventing incidental contact or ingestion and any construction worker will be prepared for an exposure in their normal daily work.

Comment 3. Ethylbenzene was detected at 7.29 milligrams per kilogram in a sample collected at two feet bgs beneath a fuel dispenser during 2004 UST upgrade activities. This concentration exceeds all the Direct Contact and Outdoor Exposure Commercial/Industrial screening levels contained in Table 1 of the Policy.

Response 3: Presence of ethylbenzene at a concentration of 7.29 mg/kg meets all the criteria listed in Table 1. In addition, concentrations in 2015 following soil remediation from 2010 through 2013 are reasonably much lower than in 2004.

Comment 4. Naphthalene concentrations were not reported. Concentrations may have decreased below the screening levels by natural attenuation of active remediation, but verification data has not been collected. By letter 15 August 2013, Central Valley Regional

Water Board staff concurred with a work plan for additional shallow soil sampling to determine whether the Direct Contact and Outdoor Air Exposure criteria are satisfied.

Response 4. 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.