

## State Water Resources Control Board

### REVIEW SUMMARY REPORT – CONCUR SECOND REVIEW – JULY 2016

#### Agency Information

Agency Name: Central Valley Regional Water Quality Control Board (Regional Water Board)	Address: 11020 Sun Center Drive #200 Rancho Cordova, CA 95670
Agency Caseworker: Christopher Flower	Case No.: 550087

#### Case Information

USTCF Claim No.: 7798	GeoTracker Global ID: T0610900067
Site Name: Scotty's Chevron	Site Address: 13643 Mono Way Sonora, CA 95370
Responsible Party: Chester Exemption Trust c/o Brad Vassar	Address: 17885 Collins Avenue #3601 Sunny Isles Beach, FL 33160
USTCF Expenditures to Date: \$1,448,226	Number of Years Case Open: 23
Fund Budget Category: VM – Verification Monitoring	

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=T0610900067](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0610900067)

#### 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 former commercial petroleum fueling facility currently developed as an automobile repair facility. An unauthorized release was reported in May 1993 during the removal of three gasoline USTs. In April 2001, two additional (one gasoline and one waste oil) USTs were removed. Approximately 155 cubic yards of impacted soil were excavated and disposed offsite in 2001. Soil vapor extraction was conducted between October 2001 and June 2004 and removed approximately 6,300 pounds of total petroleum hydrocarbons (TPH). Groundwater extraction was conducted from 2001 to 2011 and reportedly removed 46 pounds of TPH. Batch extraction events were conducted in July, September and December of 2008, and removed a total of 2,150 gallons of contaminated groundwater. Dual-phase extraction (DPE) was performed from October 2012 to December 2012, treating 31,662 gallons of impacted groundwater. The sustained mass removal rate was approximately 1 pound of TPH per day for a total of 96 pounds removed. Since 1995, eleven groundwater monitoring wells have been installed and regularly monitored. Water quality objectives have nearly been achieved. In addition to the petroleum hydrocarbon impacts, a significant tetrachloroethene (PCE) plume is present in groundwater beneath the site. The PCE plume appears to emanate from source(s) upgradient of the site.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are eight private water supply wells and two public water supply wells within 1,000 feet of the defined plume boundary. The two public water supply wells are inactive and no longer part of the public water supply system. There is a property located approximately 500 feet northeast (upgradient) of the site with two domestic water supply wells (Sterni Well and Sterni backup) that have been impacted by methyl tertiary butyl ether (MTBE) and chlorinated solvents, including PCE. None of the downgradient private supply wells from which samples have been collected and analyzed have had detections of petroleum hydrocarbons. Sullivan Creek is located approximately 700 feet to the west/northwest at its closest point to the defined plume boundary. The unauthorized release is located within the service area of a public water system, as defined in the Policy. 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 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 5. There are two public and eight private water supply wells and one surface water body located within 1,000 feet of the defined plume boundary. If not for the nearby potential receptors, the case would meet 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 dissolved concentration of benzene is less than 3,000 micrograms per liter ( $\mu\text{g/L}$ ), and the dissolved concentration of MTBE is less than 1,000  $\mu\text{g/L}$ . Furthermore, it is unlikely the MTBE and PCE that has been detected in the wells on the upgradient Sterni property are the result of the unauthorized release from this site due to the distance of the wells upgradient of the site, and because PCE was not part of the unauthorized release from the USTs at the site. The residual benzene plume is stable and is defined, with a demonstrated separation from the potential receptors. The two public water supply wells are inactive and are no longer part of the public water supply system and petroleum hydrocarbons have not been detected in samples collected from downgradient private supply wells. Therefore, State Water Board staff have determined, based on an analysis of site-specific conditions under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.
- **Vapor Intrusion to Indoor Air:** The case meets Policy Criterion 2a by Scenario 4 with a bioattenuation zone. The maximum benzene, ethylbenzene, and naphthalene concentrations in soil gas are less than, respectively, 85,000 micrograms per cubic meter ( $\mu\text{g/m}^3$ ), 1,100,000  $\mu\text{g/m}^3$ , and 93,000  $\mu\text{g/m}^3$  at a depth of five feet. These levels meet the Commercial and Residential soil gas criteria where the soil gas sample locations are overlain by soil containing less than 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH) where the oxygen soil vapor concentration is equal to or greater than 4 percent.
- **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.

**Outcome of Conference Call**

In a teleconference on June 30, 2016 between Regional Water Board staff and State Water Board staff, it was agreed that the Regional Water Board would re-initiate the closure process for this case. The Regional Water Board staff had initiated closure proceedings in 2014, but received an objection to closure from a nearby property owner. Regional Board staff stated they will resume closure proceedings by verifying the property owner's objections have been resolved. State Water Board staff concur with the Regional Water Board's decision to resume the closure process.

  
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