

State Water Resources Control Board

UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Current Agency Name: Orange County Health Care Agency (Orange County), Division of Environmental Health	Address: 1241 E. Dyer Road, Suite 120 Santa Ana, CA 92705-5611
Current Agency Caseworker: Julie Wozencraft	Case No.: 00UT020

Case Information

UST Cleanup Fund Claim No.: NA	Global ID: T0605999149
Site Name: Chevron #21-2247	Site Address: 8481 Westminster Boulevard Westminster, CA 92683 (Site)
Responsible Party: Chevron Environmental Management Company Attention: Eugene Francisco	Address: 145 South State College Boulevard, Suite 400 Brea, CA 92821-5818
USTCF Expenditures to Date: \$0	Number of Years Case Open: 15

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605999149

Summary

The Low-Threat Underground Storage Tank 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.

The Site was a petroleum service station from 1960 to 1984, and is currently occupied by an auto parts store and convenience market. The release at the Site was discovered in 1984 when concentrations of petroleum constituents were detected in soil during removal of five USTs (four 4,000 gallon gasoline tanks and one 550 gallon used oil tank) prior to redevelopment of the former facility. A case was opened for the release in June 2000. Soil investigations were reportedly conducted beginning in the 1980's, but these data were unavailable for review. Soil vapor extraction (SVE) was conducted from June 2006 through June 2009, and from March 2011 to December 2011. A total of 17,167 pounds of petroleum hydrocarbons were removed by the SVE system and recovery rates reached asymptotic levels during 2011. Confirmation soil borings were completed in January 2013 to evaluate the effectiveness of the SVE system.

Soil at the Site contains less than 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH) in the upper five feet of the subsurface, except for one confirmation soil sample, CB-4-5, which contained 4,300 mg/kg. The CB-4 soil boring is about 70 feet from the building at the Site, and there are eight other soil borings that are closer that had less than

100 mg/kg of TPH in soil samples collected at five feet bgs or shallower. These data suggest there is a low risk of petroleum vapors migrating from soil to indoor air in the existing building.

The CB-4-5 soil sample had naphthalene at 100 J¹ mg/kg. This concentration is higher than the threshold of 45 mg/kg but is less than the threshold of 219 mg/kg in Table 1 of the Policy. All of the other confirmation soil samples, including the samples collected above (at 2.5 feet below ground surface [bgs]) and below (at 10 feet bgs) CB-4-5, were lower than the threshold for commercial/industrial land use. These data indicate the lateral and vertical distribution of the elevated concentration of naphthalene is limited in extent. The concentrations of the carcinogenic polyaromatic hydrocarbons in the confirmation soil samples were less than the threshold for commercial/industrial land use in Table 1 of the Policy. The Site is paved, which breaks the pathway and precludes the risk of accidental exposure through direct contact with the contaminated soil. The presence of residual contamination at the location and depth of CB-4-5 should be taken into account when issuing and executing building or other permits at the Site. Any construction crew performing subsurface work should anticipate dealing appropriately with environmental hazards.

The most recent groundwater levels were measured in September 2014 at 11 to 12 feet bgs. Groundwater has been impacted by petroleum hydrocarbons, and the plume of TPH as gasoline extends off site and may commingle with a petroleum plume from a separate UST case to the south of the Site. The maximum benzene concentration in groundwater has been less than 100 micrograms per liter in all monitoring wells since Third Quarter 2007. The benzene plume has decreased in areal extent from a maximum length of about 300 feet in 2010 to less than 25 feet in September 2014. During this last monitoring event, benzene was detected in only two of the thirteen monitoring wells at concentrations above the detection limit, but below the reporting limit. Methyl tertiary butyl ether has not been detected or has been present at concentrations above the detection limit, but below the reporting limit since groundwater monitoring began in 2001.

Remaining petroleum constituents are limited, stable, and decreasing. Additional assessment would be unnecessary and will not likely change the conceptual model. Any remaining petroleum constituents do not pose significant risk to human health, safety, and the environment under current conditions.

Rationale for Closure under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy.
- Groundwater Media-Specific Criteria – Site meets the criteria in **Class 1**. The contaminant plume that exceeds water quality objectives is less than 100 feet in length. There is no free product. The nearest existing water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- Petroleum Vapor Intrusion to Indoor Air – The case meets Policy **Criteria 2 (a), Scenario 3**. As applicable, the extent of the bioattenuation zone, oxygen concentrations in soil gas, concentrations of TPH as gasoline and diesel combined in soil, and dissolved concentrations of benzene in groundwater meet the Policy.

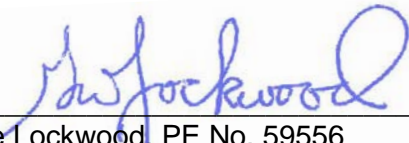
¹ The J designation indicates the concentration in the sample was an estimated quantitation between the method detection limit and the reporting limit.

Chevron #21-2247
8481 Westminster Boulevard, Westminster

- Direct Contact and Outdoor Air Exposure – Site meets **Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, the environment and is consistent with chapter 6.7 of the Health and Safety Code and implementing regulations, applicable state policies for water quality control and the applicable water quality control plan, and case closure is recommended



George Lockwood, PE No. 59556
Senior Water Resource Control Engineer

9/24/2015

Date

