

State Water Resources Control Board

UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Agency Name: Orange County Health Care Agency Division of Environmental Health (County)	Address: 1241 E. Dyer Road Suite 120 Santa Ana, CA 92705
Agency Caseworker: Tamara Escobedo	Case No.: 97UT006

Case Information

UST Cleanup Fund (Fund) Claim No.: 16387	Global ID: T0605902030
Site Name: Unocal Cop #5888	Site Address: 15482 Goldenwest Street Westminster, CA 92683
Responsible Party Contact: Phillips 66 Company Attn: Louis Mosconi	Address: 3900 Kilroy Airport Way, Suite 210 Long Beach, CA 90806
Fund Expenditures to Date: \$0	Number of Years Case Open: 25

GeoTracker Case Record: <http://geotracker.waterboards.ca.gov/?gid=T0605902030>

Summary

This case has been proposed for closure by the State Water Resources Control Board at the request of the Orange County Health Care Agency, which concurs with closure.

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 because they pose a low threat to human health, safety, and the environment. The Site meets all of the required criteria of the Policy and therefore, is subject to closure.

The Site is currently occupied by a Dunkin' Donuts coffee and pastry fast food restaurant. An unauthorized release was reported in February 1997 following the removal and replacement of two 10,000-gallon gasoline USTs and removal of one 280-gallon waste oil UST.

In February 1997, approximately 862 tons of petroleum hydrocarbon impacted soil was over-excavated to approximately 15 feet below ground surface and disposed off-site and approximately 9,500 gallons of groundwater were extracted during removal/replacement of the USTs. An air-sparge/soil vapor extraction (AS/SVE) system was installed and operated at the site from February 2002 to September 2012. Approximately 97,420 pounds of vapor phase petroleum hydrocarbons were removed from the site during operation of the AS/SVE system. There is no record of impacted soil being excavated when the second generation of USTs were removed during decommission of the petroleum fueling facility in 2015. Free product was observed only once at a thickness of 0.01 foot. Petroleum constituents were not detected in the top 10 feet of soils nor in soil vapor samples collected at 5 feet below ground surface.

Water quality objectives have been attained for all monitoring wells except for benzene. The defined benzene plume is less than 100 feet in length. The TBA plume is located southwest of the Site and is approximately 200 feet in length. Over the last five years, the areal extent of the TBA plume has decreased and the lateral boundary has been defined. The nearest surface water body to the TBA plume is an unnamed man-made pond in Greer Park located 300 feet west southwest and the nearest surface water body to the defined benzene plume is > 1000 feet away. The nearest supply well is located approximately 4,500 feet southeast of the Site. Although elevated TBA concentrations remain in groundwater downgradient of the site, TBA does not have a water quality objective according to the Santa Ana Regional Water Quality Control Board basin plan. The plume is defined, stable to decreasing in areal extent, and is unlikely to pose a risk to the man-made pond in Greer Park nor to supply wells. The petroleum release is limited to the soil and shallow groundwater and residual impacts are limited in extent. The affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the contaminated groundwater will be used as a source of drinking water in the foreseeable future.

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, or 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 5**. The regulatory agency determines, based on an analysis of Site-specific conditions that under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health, safety, and to the environment and water quality objectives will be achieved within a reasonable time frame.

- Petroleum Vapor Intrusion to Indoor Air – Site meets **Criteria 2 (a), Scenario 4**. The concentrations of benzene, ethylbenzene, and naphthalene in soil gas are less than the Policy limits as it applies to the bioattenuation zone, land use, and existing or planned future building structures at the Site.
- Direct Contact and Outdoor Air Exposure – Site meets **Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 of the Policy.

There are no soil sample results in the case record for naphthalene from 0 to 5 feet below ground surface. 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% benzene and 0.25% naphthalene. Therefore, benzene concentrations 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 Table 1 of the Policy. Therefore, estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact with a safety factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, and the environment. The corrective action performed at this Site is consistent with chapter 6.7 of division 20 of the Health and Safety Code, implementing regulations, applicable state policies for water quality control and applicable water quality control plans. Case closure is recommended.

Reviewed By: 
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Senior Engineering Geologist

5/26/2021
Date

