



# State Water Resources Control Board

## UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

#### Agency Information

Agency Name: Santa Ana Regional Water Quality Control	Address: 3737 Main Street, Suite 500 Biverside, CA 02501 2220
Board	Riverside, CA 92501-5559
Agency Caseworker: Chris Marino	Case No.: 083003974T

#### Case Information

UST Cleanup Fund (Fund) Claim No.: 19594	Global ID: T0605978616
Site Name:	Site Address:
Shell Service Station	1200 South State College Boulevard
	Anaheim, CA 92806 (Site)
Responsible Party	Address:
Equilon Enterprises LLC DBA Shell Oil Products Attention: Andrea Wing	20945 South Wilmington Avenue Carson, CA 90810
Fund Expenditures to Date: \$0	Number of Years Case Open: 19

GeoTracker Case Record: http://geotracker.waterboards.ca.gov/?gid=T0605978616

#### Summary

#### This case has been proposed for closure by the State Water Resources Control Board at the request of the Santa Ana Regional Water Quality Control Board, 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 currently operates as a commercial fueling facility. The release was discovered in February 2003 when elevated concentrations of petroleum hydrocarbons were encountered during monitoring well installation activities. In 2003, three 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. In May E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

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2003, 1,158 tons of petroleum hydrocarbon impacted soil was excavated and disposed off-site as part of UST removal activities. In October 2005, 56 pounds of vapor-phase hydrocarbons were recovered during a soil vapor extraction (SVE) pilot test. The SVE system operated intermittently from September 2007 to May 2018, removing approximately 923 pounds of vapor-phase hydrocarbons. From 2010 to November 2021, Light Non-Aqueous Phase Liquid (LNAPL) recovery was conducted via a combination of passive skimmers and manual bailing, resulting in a cumulative total of 1.9 gallons of LNAPL recovered. LNAPL was intermittently present at the site in one monitoring well from 2010 to 2021. Additionally, elevated concentrations of Total Petroleum Hydrocarbons (TPH) have been encountered in site soil at shallow depths.

LNAPL was not encountered at the site during recent well gauging activities. Historical LNAPL thicknesses reported at the site exhibited a stable/decreasing trend and consistently were encountered at relatively low thicknesses. Therefore, the LNAPL appear to be mobile or migrating and does not constitute free product as defined in the Policy. Remaining petroleum hydrocarbons in groundwater exist at low concentrations. Elevated concentrations of petroleum hydrocarbons in site soil were reported in borings located within the former source area of the site. Petroleum hydrocarbon concentrations are well defined and do not extend offsite. The site operates as an active commercial fueling station and therefore is exempt from the petroleum vapor intrusion to indoor air pathway.

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 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 Site meets the EXCEPTION for vapor intrusion to indoor air. Exposure to petroleum vapors associated with historical fuel system releases are comparatively insignificant relative to exposures from small surface spills and fugitive vapor releases that typically occur at active fueling facilities.
- 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.

There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated

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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:** 

Matthew Cohen, P.G. No. 9077 Senior Engineering Geologist 8 / 11 / 2022

Date

