

## State Water Resources Control Board

### UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

#### Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Santa Ana Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501
Agency Caseworker: Ken Williams	Case No.: 083001136T

#### Case Information

UST Cleanup Fund (Fund) Claim No.: 4856	Global ID: T0605900896
Site Name: Chevron #9-0786	Site Address: 700 East Imperial Highway Brea, CA 92821 (Site)
Responsible Party:  Chevron Environmental Management Company Attention: Christopher Penza <a href="mailto:Cpenza@chevron.com">Cpenza@chevron.com</a>	Address:  1546 China Grade Loop, L14 Bakersfield, CA 93308-9700
Fund Expenditures to Date: \$287,005	Number of Years Case Open: 30

**GeoTracker Case Record:** <http://geotracker.waterboards.ca.gov/?gid=T0605900896>

#### 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.

Chevron #9-0786  
700 Imperial Highway, Brea

The Site is currently occupied by an active fueling facility. The unauthorized release was discovered during the removal of three gasoline USTs, one diesel UST, and one waste oil UST in 1990 when soil sampling indicated elevated concentrations of petroleum constituents. During UST removal, approximately 15 cubic yards of impacted soil were over-excavated and disposed of off-site. An additional approximately 20 cubic yards of impacted soil were over-excavated and disposed of off-site during dispenser upgrade activities in 1996. A one-day soil vapor extraction pilot test was conducted in 1994 and removed 6.5 pounds of petroleum hydrocarbons. Enhanced fluid recovery was conducted at the Site in 2010 and removed 20,288 gallons of petroleum impacted groundwater containing an estimated 1.02 pounds of total petroleum hydrocarbons (TPH). Benzene was not detected in any of the groundwater samples collected during the most recent groundwater monitoring event in November 2020. Methyl tert-butyl ether (MTBE) in two of eight monitoring wells and limited residual petroleum impact remains in the former dispenser area.

Source area and downgradient wells have exhibited stable and decreasing concentrations of MTBE since the 1990s indicating a stable plume. The MTBE plume exceeding water quality objectives (WQOs) is projected to be approximately 150 feet. Depth to groundwater onsite has been consistently >30 feet below ground surface since 2005 and based on groundwater monitoring data, there is evidence of biodegradation of MTBE across the Site. The distance to the nearest surface water body or supply well is greater than 1,500 feet from the plume boundary. Based on the information provided above, the release is considered to be low threat to groundwater resources. The soil sample from the waste oil UST was not analyzed for the presence of poly-cyclic aromatic hydrocarbons, however there was no detection of total recoverable petroleum hydrocarbons indicating a low likelihood of a significant release from the waste oil UST. Residual petroleum impact is limited to shallow soil in the vicinity of former dispensers and the Site is an active commercial fueling facility.

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.


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- 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 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

5/26/2021  
Date

