

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 92501-3348
Agency Caseworker: Miguel Oviedo	Case No.: 083003492T

Case Information

UST Cleanup Fund (Fund) Claim No.:17350	Global ID: T0605902299
Site Name: Archies Texaco	Site Address: 4502 Westminster Avenue Santa Ana, CA 92703 (Site)
M. K. & Sons Attention: Shavarsh Keuilian	Address: 4518 Westminster Avenue Santa Ana, CA 92703
Fund Expenditures to Date: \$1,060,820	Number of Years Case Open: 24

GeoTracker Case Record: <http://geotracker.waterboards.ca.gov/?gid=T0605902299>

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 is an active commercial petroleum fueling facility and convenience store. An unauthorized release was reported in May 1999 following the removal of three 10,000-gallon USTs (two gasoline, one diesel). During UST removal activities, soil was over-

Archies Texaco, T0605902299
4502 Westminster Avenue, Santa Ana

excavated to a depth of 3 feet below ground surface (bgs) along the product lines and up to 14 feet bgs beneath the USTs.

A groundwater extraction (GWE) system operated between August 2012 and February 2013 and intermittently from April 2013 through July 2014. During July 2014 the GWE system was modified and from August 2014 through August 2017, the system operated to extract free product and/or in-situ modified oxidation in the vicinity of MW-3 through MW-6. Approximately 1.4 million gallons of petroleum impacted water were removed from the subsurface. Since 2004, nine (9) groundwater monitoring wells have been installed and monitored regularly. Water quality objectives (WQOs) have been reached with the exception of benzene in five monitoring wells and MTBE in one monitoring well. The remaining contaminant plumes above water quality objectives are less than 100 feet in length and are stable and decreasing in areal extent.

Residual petroleum constituent concentrations in soils were met for commercial/industrial criteria in Table 1 except for ethylbenzene at 10 feet bgs. Residual soil impacts are limited in extent and located under a paved surface, limiting the potential for direct contact exposure. While the site is an active commercial petroleum fueling facility and meets the Policy's exception for petroleum vapor intrusion to indoor air, the conditions onsite also meet Criteria 2(a), Scenario 3. Total petroleum hydrocarbons were not detected in the top 10 feet of soil in the samples collected from installation of MW-2 and MW-3, and the tank pit to the northeast of the onsite building was excavated to a depth of 13 feet bgs. Additionally, recent depth to groundwater was approximately 16 feet bgs and benzene concentrations in the residual plume are less than 1000 micrograms per liter. Therefore, there is a low risk of vapor intrusion to indoor air from residual petroleum constituents in the subsurface. Exposures 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.

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 WQOs 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 Criteria 2 (a), Scenario 3**. As applicable, the extent of the bioattenuation zone, oxygen concentrations in soil gas, concentrations of total petroleum hydrocarbons as gasoline and

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diesel combined in soil, and dissolved concentrations of benzene in groundwater meet the Policy.

- Direct Contact and Outdoor Air Exposure – Site **meets Criteria 3 (b)**. Maximum concentrations of petroleum constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health.

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:



6/9/2023

Julie Johnson, P.G. No. 9707
Acting Senior Engineering Geologist

Date

