

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: Miguel Oviedo	Case No.: 87UT220

Case Information

UST Cleanup Fund (Fund) Claim No.: N/A	Global ID: T0605900585
Site Name: Brookhurst Katella Associates	Site Address: 11011 Brookhurst Street Garden Grove, CA 92840 (Site)
Responsible Party: 11011 Brookhurst, LLC Attention: Mardy Ying	Address: 12250 Whittier Boulevard Whittier, CA 90602
Fund Expenditures to Date: N/A	Number of Years Case Open: 27

[GeoTracker Case Record](http://geotracker.waterboards.ca.gov/?gid=T0605900585): <http://geotracker.waterboards.ca.gov/?gid=T0605900585>

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 retail strip mall with a convenience store, a restaurant, and a dry cleaner occupying the south half of the parcel. The northern half of the Site has paved parking and landscaping.

The Site operated as a gasoline service station until the mid-1980s when the station was abandoned. Three gasoline USTs were removed in October 1987 and the station was demolished. At the time of UST removal, 8,900 cubic yards of petroleum hydrocarbon impacted soil was excavated and aerated on the Site before being returned to the excavation.

During June 2020, an 8-hour soil vapor extraction pilot test was conducted at the Site removing 7.8 pounds of petroleum hydrocarbons from the subsurface. On November 29, 2020, a confirmation soil boring was advanced to groundwater at the Site. The groundwater sample indicated low levels of petroleum hydrocarbons that are below the Policy's Groundwater Media-Specific criteria. In August 2023, five soil vapor probes were installed and sampled at the Site. Petroleum related gas concentrations from the collected soil vapor samples meet the Policy's vapor intrusion criteria.

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 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 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.

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