

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: Rose Scott	Case No.: 083000277T

Case Information

UST Cleanup Fund (Fund) Claim No.: NA	Global ID: T0605900215
Site Name: Mobil #18-HCN	Site Address: 1351 East Dyer Road Santa Ana, CA 92705 (Site)
Responsible Parties: Circle K Stores, Inc. Attention: Alan Chubberley	Address: 1100 Situs Court, Suite 100 Raleigh, North Carolina, 27606-4295
Fund Expenditures to Date: NA	Number of Years Case Open: 40

GeoTracker Case Record: <http://geotracker.waterboards.ca.gov/?gid=T0605900215>

Summary

This case has been proposed for closure by the State Water Resources Control Board at the request of the Santa Ana Water 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 fueling facility. The unauthorized release was discovered in 1981 following reports of gasoline vapors detected in a telephone cable box adjacent to the Site. Between 1981 and 1991, an automated recovery system extracted 22,633,900 gallons of impacted groundwater and 6,632 gallons of liquid-phase hydrocarbons. In March 1993, 40 tons of petroleum-impacted soil was over-

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

Mobil #18-HCN
1351 East Dyer Road, Santa Ana

excavated and disposed off-site following removal of a 550-gallon waste-oil UST. In March and April 1996, one 550-gallon waste-oil UST, two hydraulic hoists, and one clarifier were removed from the Site. In September 1998, an eight-hour dual-phase extraction test removed 600 gallons of impacted groundwater along with 2.56 gallons of hydrocarbon vapors. In April 2002, one 6,000-gallon diesel UST, two gasoline USTs (8,000 gallon and 10,000 gallon), product piping, and dispensers were removed and replaced. Approximately 1,295 tons of petroleum-impacted soil was over-excavated and disposed off-site during these activities. Between October 2000 and July 2006, groundwater pump and treat operations removed and treated 549,483 gallons of impacted groundwater. In December 2016, a short-term groundwater extraction event removed 1,050 gallons of petroleum-impacted groundwater from three Site wells. Soil sampling in 2014 indicated the presence of residual petroleum at depths ranging from approximately 15-25 feet below ground surface (ft bgs) but did not report results for poly-cyclic aromatic hydrocarbons (PAHs).

The elevated petroleum hydrocarbon concentrations at depth are limited in extent and do not likely extend off-site. Current groundwater sampling data indicates that petroleum hydrocarbons are limited in extent. A groundwater investigation conducted in 2015 defined the plume vertically to a maximum depth of 48 ft bgs. Historical groundwater results indicate the presence of trichloroethylene (TCE) and tetrachloroethylene (PCE) in groundwater; however, soil data collected during waste-oil tank removal indicates that no chlorinated hydrocarbons (including TCE and PCE) are associated with a release from the Site. It is likely that TCE and PCE detected in groundwater is from an off-site source.

Petroleum was not detected in the upper 10 feet of Site soil during confirmation sampling and a soil vapor sample indicated vapor concentrations are below Policy limits. The area of the hydraulic hoist was over-excavated to 11 feet below ground surface, so it is unlikely that PAHs remain in the upper five feet of soil. 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 3**. As applicable, the extent of the bioattenuation zone, oxygen concentrations in soil gas, concentrations of total petroleum hydrocarbons as gasoline and diesel

Mobil #18-HCN
1351 East Dyer Road, Santa Ana

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.



Matthew Cohen, P.G. No. 9077
Senior Engineering Geologist

5/26/2021

Date

