

State Water Resources Control Board

UST CASE CLOSURE SUMMARY

Agency Information

Agency Name: Orange County Local Oversight Program	Address: 1241 East Dyer Road, Suite 120 Santa Ana, CA 92705
Agency Caseworker: Mr. Kevin Lambert	Case No.: 02UT005

Case Information

USTCF Claim No.: None	Global ID: T0605910511
Site Name: Shell Oil	Site Address: 10961 Los Alamitos Boulevard Los Alamitos, CA 90720 (Site)
Responsible Party: Shell Oil Products US Attention: Ms. Deborah Pryor	Address: 20945 South Wilmington Avenue Carson, CA 90810
USTCF Expenditures to Date: N/A	Number of Years Case Open: 13

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605910511

Summary

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. This case meets all of the required criteria of the Policy.

The Site is operated as an active fueling facility. This case was originally opened in 1988 and closed in 1998. A second release at the Site was discovered in September 2001 when petroleum constituents were detected in groundwater samples and in soil samples collected at 21 feet below ground surface (bgs). Soil borings were advanced at the Site in October 2003, February 2004, and September 2004 to a maximum depth of 95 feet bgs. Petroleum constituents were detected in samples collected between 15 and 35 feet bgs. Four magnesium sulfate injection events were conducted at the Site between November 2011 and August 2012. During each event, approximately 40 to 55 gallons of magnesium sulfate were added to a remediation well at the Site.

Groundwater is encountered beneath the Site at an average depth of 14 feet bgs. The groundwater plume exceeding water quality objectives is less than 100 feet in length and has been stable or decreasing since 2011. The nearest public supply well and surface water body are greater than 1,000 feet from the Site. Additional corrective action will not likely change the conceptual site model. Residual petroleum constituents pose a low risk to human health, safety, and the environment.

Rationale for Closure under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy.
- Groundwater Media-Specific Criteria – Site meets the criterion 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 water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- Petroleum Vapor Intrusion to Indoor Air Criteria – Site meets **EXCEPTION**. Exposure to petroleum vapors associated with historical fuel system releases is 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 Criteria – Site meets **CRITERION (3) a**. Maximum concentrations of residual petroleum constituents in soil are less than or equal to those listed in Table 1. The estimated naphthalene concentrations are less than the thresholds in Table 1 of the Policy for direct contact. 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, and is consistent with chapter 6.7 of the Health and Safety Code and implementing regulations, applicable state policies for water quality control, and the applicable water quality control plan, and case closure is recommended.



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Senior Water Resource Control Engineer

10/28/2014

Date

