

## State Water Resources Control Board

### UST CASE CLOSURE SUMMARY

#### Agency Information

Current Agency Name: Orange County Health Care Agency	Address: 1241 East Dyer Road, Suite 120 Santa Ana, CA 92705
Current Agency Caseworker: Ms. Denamarie Baker	Case No.: 03UT028

#### Case Information

USTCF Claim No.: None	Global ID: T0605989198
Site Name: Shell Oil	Site Address: 27875 Santa Margarita Parkway Mission Viejo, CA 92691 (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: 11

URL: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0605989198](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605989198)

#### 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 release at the Site was discovered during a dispenser upgrade in April 2003. Low concentrations of petroleum constituents were identified in shallow soil beneath the former dispensers. Forty-seven groundwater monitoring wells were installed to evaluate petroleum constituents in groundwater. Fifty-three soil borings were constructed to define the vertical and lateral extent of petroleum impacts to soil. Impacts to soil and groundwater have been delineated and are stable to decreasing. The Site is operated as an active retail fueling facility.

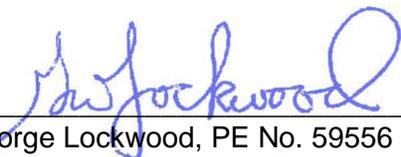
Two distinct water bearing zones were identified at the Site. The average depth to groundwater in the first water bearing zone is approximately 28 feet below ground surface (bgs). The average depth to groundwater in the second water bearing zone is approximately 50 feet bgs. The groundwater plume exceeding water quality objectives is less than 250 feet long. 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 2**. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. The dissolved benzene concentration is less than 3,000 µg/L, and the dissolved MTBE concentration is less than 1,000 µg/L.
- 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

1/29/2015

Date

