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## State Water Resources Control Board

### REVIEW SUMMARY REPORT – ADDITIONAL WORK PRELIMINARY REVIEW – JANUARY 2016

#### Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Regional Water Board)	Address: 3737 Main Street, Suite 500, Riverside, CA 92501
Agency Caseworker: Tom E. Mbeke-Ekanem	Case No.: 083002086T

#### Case Information

EAR Claim No.: E0148 / 7051	GeoTracker Global ID: T0605901553
Site Name: Huntington Harbour Car Wash	Site Address: 16921 Algonquin Huntington Beach, CA 92649
Responsible Party: Huntington Harbour Car Wash Attn: George Armstrong	Address: 16921 Algonquin Huntington Beach, CA 92649
USTCF Expenditures to Date: \$1,495,000	Number of Years Case Open: 18

To view all public documents for this case available on GeoTracker use the following URL:

[http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0605901553](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901553)

#### Summary

The Low-Threat Underground Storage Tank (UST) 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 does not meet all of the required criteria of the Policy. Highlights of the case follow:

This Site is an active commercial petroleum fueling facility and car wash. An unauthorized release was reported in September 1992, following a tank leak test. Four USTs (three gasoline, one waste oil) were removed between 1992 and 1993 and approximately 370 tons of impacted soil were excavated and disposed offsite. In May 1994, a soil vapor extraction (SVE) and air sparge pilot test was conducted at the Site. SVE was conducted between July 2000 and June 2004 with a reported removal of 71,633 pounds of petroleum fuel hydrocarbons. In January 2004 and January 2009, dual phase extraction tests were conducted at the Site. A chemical injection test was also performed in 2007. Active remediation has not been conducted at the Site for the past six years. Since 1993, up to 36 groundwater monitoring wells have been installed and monitored. According to the on-site groundwater data, water quality objectives have been achieved or nearly achieved in on-site wells, except in well MW-1 in the source area. The off-site contaminant plume has been noted at over 1,000 feet from the subject site and appears to have free product at the distal end. There are known oil wells and oil pipelines in the area near the Site

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no public water supply wells or surface water bodies within 250 feet of the defined plume boundary. No other water supply wells have been identified within 250 feet of the defined plume boundary in files reviewed. The unauthorized release is located within the service area of a public water system, as defined in the Policy. The affected shallow groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected shallow

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groundwater will be used as a source of drinking water in the foreseeable future. Other designated beneficial uses of the affected shallow groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting.

#### **Rationale for Closure under the Policy**

- **General Criteria:** The case does not meet all eight Policy general criteria; Offsite free product has not been removed to the maximum extent practicable.
- **Groundwater Specific Criteria:** The case does not meet Policy criteria because the contaminant plume that exceeds water quality objectives is greater than 250 feet in length and the dissolved concentration of benzene is greater than 3,000 micrograms per liter ( $\mu\text{g/L}$ ).
- **Vapor Intrusion to Indoor Air:** This active fueling facility meets the Active Commercial Petroleum Fueling Facility 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. The reported off-site conditions meet Policy Criterion 2a by Scenario 1. The minimum distance between the groundwater containing greater than 1,000  $\mu\text{g/L}$  of benzene, and all existing or potential buildings is greater than 30 feet, and the intervening soil contains less than 100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH).
- **Direct Contact and Outdoor Air Exposure:** The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. 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 percent benzene and 0.25 percent naphthalene. Therefore, benzene 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 Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

#### **Objections to Closure and Responses**

According to the LTCP Checklist page in GeoTracker, finalized on June 9, 2014, the Regional Water Board objects to UST case closure because:

- The contaminant plume that exceeds water quality objectives is not stable or decreasing in areal extent.

**RESPONSE:** We concur.

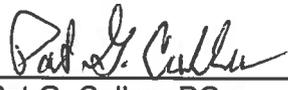
**Recommendation**

The State Water Board staff notes that this case was referred to the Regional Water Board in March 2012 and no regulatory directive has been prepared. The presence of free product in the off-site well MW-17 and the well's large distance from the Site is of concern.

The State Water Board staff recommends:

- Renew groundwater sampling of all onsite and offsite wells to determine the current groundwater conditions and to establish whether the on-site release contributed to the off-site plume.
- Further characterize the offsite groundwater plume and fingerprint offsite free product, if any.
- Continued free product removal from the offsite well MW-17, and
- Conduct a survey to identify existing oil and gas wells and production pipelines in the area.

  
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