UST CASE CLOSURE SUMMARY

Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Regional Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501-3339
Agency Caseworker: Valerie Jahn-Bull	Case No.: 083603858T

Case Information

USTCF Claim Nos.: 17214, 2738	Global ID: T060711480
Site Name: French Property	Site Address: 147 East Baseline Avenue San Bernardino, CA 92410 (Site)
Petitioner: Robert L. French	Address: 1308 West Robinhood Drive, Suite 14 Stockton, CA 92410
USTCF Expenditures to Date: $531,668	Number of Years Case Open: 13

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T060711480

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 Low-Threat Policy. This Case meets all of the required criteria of the Policy.

The release at the Site was discovered when three underground storage tanks (UST) were removed in August 2001. The release is limited to soil less than 65 feet in depth. Clean soil exists from 65 feet to maximum depth explored of 110 feet below ground surface (bgs). Groundwater has not been encountered at exploration depths. Groundwater data for wells within a 1-mile radius of the Site indicate that the regional groundwater table is approximately 170 feet bgs beneath the Site. The Site overlies alluvial deposits consisting primarily of silty sand to sand with some interbedded silts and clays. At a depth of approximately 27 feet bgs, a laterally continuous silt layer exists that appears to have retarded migration of the petroleum release to greater depths. A soil vapor extraction (SVE) system was used to remediate soil from May 2006 to February 2012. The SVE system was shut down during February 2012 after asymptotic conditions were demonstrated. Confirmation soil samples collected during March 2012 indicate that the SVE system was successful in removing petroleum hydrocarbons within the impacted soil to low-threat conditions. Residual petroleum hydrocarbons remain at the Site, but primarily within the low permeable silt layer encountered approximately between 27 and 37 feet bgs.

Residual petroleum constituents are limited to shallow soil to a depth of approximately 65 feet bgs. Remedial actions have been implemented and further remediation would be ineffective and expensive. Additional assessment/monitoring will not likely change the CSM. Any

remaining petroleum constituents do not pose significant risk to human health, safety or 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 **EXCEPTION**. There is not sufficient mobile constituents [leachate, vapors, or light non-aqueous-phase liquids (LNAPL)] to cause groundwater to exceed the groundwater criteria. Groundwater has not been encountered to a maximum depth explored of 110 feet bgs. At least 35 feet of clean soil exists beneath any detectable petroleum hydrocarbons in soil.

- Petroleum Vapor Intrusion to Indoor Air – Site meets **CRITERIA (2) a, Scenario 2**. There is greater than 30 feet separation from existing building foundation and residual soil contamination at 27 feet bgs. No buildings for human occupancy are reasonably expected to be constructed in the future directly above the residual soil contamination.

- Direct Contact and Outdoor Air Exposure – Site meets **CRITERIA (3) a**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples collected in March 2012 are less than or equal to those listed in Table 1 of the Policy. There are no shallow soil samples 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 directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Table 1. Therefore, 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.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, 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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