REVIEW SUMMARY REPORT – ADDITIONAL WORK
THIRD REVIEW – APRIL 2015

Agency Information

Agency Name: Alameda County Environmental Health Department (County)	Address: 1131 Harbor Bay Parkway Alameda, CA 94502
Agency Caseworker: Mark Detterman	Case No.: RO0000302

Case Information

USTCF Claim No.: 7821	GeoTracker Global ID: T0600100639
Site Name: German Autocraft	Site Address: 301 East 14th Street San Leandro, CA 94577
Responsible Party: Seung Tae Lee c/o Stratus Environmental, Inc.	Address: 3330 Cameron Park Drive Suite 550 Cameron Park, CA 95682
Responsible Party: Stephen & Elizabeth Wilhelm	Address: Private Residence
Responsible Party: William Andrade	Address: P.O. Box 2786 Dublin, CA 94568
USTCF Expenditures to Date: $631,248	Number of Years Case Open: 23

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=T0600100639

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 case is an active automotive repair facility. An unauthorized release was reported in May 1993. Five gasoline USTs and one waste oil UST were removed in 1990. During tank removal, excavation was performed to 6 feet below ground surface (bgs) and the excavated soil was used as backfill. In February 2009, a five-day dual phase extraction test was performed; vapor extraction and air sparging were deemed ineffective due to the tight silt/clay formation at the Site. In 2011, approximately 788 cubic yards of soil were removed from the former UST area and excavation was performed to 12 feet bgs. Active remediation has not been conducted at the Site for the past four years. Since 1996, fifteen groundwater monitoring wells have been installed and regularly monitored; three monitoring wells have been destroyed. One offsite domestic irrigation well has also been monitored since 1996 and has never indicated detectable petroleum hydrocarbon constituents. According to groundwater data, water quality objectives have not been achieved.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no surface water bodies within 1,000 feet of the Site. There is one

domestic irrigation well approximately 500 feet downgradient of the Site, and one domestic irrigation well approximately 1,000 feet downgradient of the Site; these domestic irrigation wells are not drinking water sources. The unauthorized release is located within the service area of a public water system, as defined in the Policy.

Rationale for Closure under the Policy

- General Criteria: The case meets six of eight Policy general criteria. Free product is present in one onsite groundwater monitoring well and has not been removed to the maximum extent practicable, and secondary source has not been removed to the extent practicable.
- Groundwater Specific Criteria: The case does not meet Policy Criterion. Free product is present in one onsite groundwater monitoring well and has not been removed to the maximum extent practicable. The extent of the plume has not been defined. The plume is not stable.
- Vapor Intrusion to Indoor Air: The case meets Policy Criterion 2a by Scenario 4 with no bioattenuation zone. The maximum benzene, ethylbenzene, and naphthalene concentrations in soil gas are less than, respectively, 280 micrograms per cubic meter (µg/m^3), 3,600 µg/m^3, and 310 µg/m^3, at a depth of five feet. These levels meet the Commercial soil gas criteria. The plume extends offsite to the west, under residential properties. The offsite properties meet Policy Criterion 2a by scenario 3b. The maximum benzene concentration in groundwater is less than 1,000 micrograms per liter (µg/L). The minimum depth to groundwater is greater than 10 feet, overlain by soil containing less than 100 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 between 0 and 10 feet bgs. 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

Alameda County objects to UST case closure (letter dated February 11, 2015 and Low Threat Closure Policy Checklist dated May 1, 2014) because:

- The Site continues to fail to meet the LTCP General Criteria d (Free Product).
  RESPONSE: Agreed. The case does not meet Policy Criterion due to the presence of free product in groundwater monitoring well MW-15, which has not been removed to the maximum extent practicable.
- The Site fails the Media Specific Criteria for Groundwater.
  RESPONSE: Agreed. The extent of the plume has not been defined, and the plume is not stable.
- The Site fails the Media Specific Criteria for Vapor Intrusion to Indoor Air.
  RESPONSE: The case meets Policy Criterion 2a by Scenario 4 with no bioattenuation zone. The offsite properties meet Policy Criterion 2a by scenario 3b. See Rationale above.
- The Site fails the Media Specific Criteria for Direct Contact and Outdoor Air Exposure criteria scenarios.
  RESPONSE: The case meets Policy Criterion 3a. See Rationale above.

Recommendation
The State Water Board staff recommend that the County direct the Responsible Party to:

- Using commercially available remediation technologies, perform free product recovery on well MW-15, and focused groundwater remediation on wells MW-10 and MW-12 to stabilize and reduce the contaminant plume.
- Define the downgradient extent of the contaminant plume.
- Evaluate additional source removal options for the former tank pit area, such as targeted overexcavation, large diameter auger excavation or other.
- Additional vapor assessment activities are not required.

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