

**State Water Resources Control Board**

**REVIEW SUMMARY REPORT – ADDITIONAL WORK  
SECOND REVIEW – MAY 2016**

**Agency Information**

Agency Name: Santa Clara County Department Of Environmental Health (County)	Address: 1555 Berger Drive, Suite 300 San Jose, CA 95112-2716
Agency Caseworker: Aaron Costa	Case No.: 06S1E1K01f

**Case Information**

USTCF Claim No.: 17241	GeoTracker Global ID: T0608500101
Site Name: Former Action Forklift	Site Address: 1441 Terminal Avenue San Jose, CA 95112
Responsible Party: Edward and Karen Sarafian	Address: Private Residence
USTCF Expenditures to Date: \$324,609	Number of Years Case Open: 31
Fund Budget Category: CAP/REM	

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=T0608500101](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608500101)

**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:

The Site is an automobile repair and storage facility, and was formerly a forklift supplier. An unauthorized release was reported in July 1985. One waste oil UST associated with former site activities was closed in place in August 1985, and removed from the site in August 2007. In September 2008, five temporary soil vapor probes were installed and sampled. In January 2011, a second UST (gasoline) was discovered onsite; this UST was removed in August 2011. A pilot test using in situ chemical oxidation was conducted in January and February 2011. In May 2013, five permanent soil vapor probes were installed and sampled quarterly for one year. In December 2014 a 158-hour long dual-phase extraction (DPE) pilot test removed approximately 2 pounds of petroleum hydrocarbons and 5,550 gallons of affected groundwater. Since 1985, six groundwater monitoring wells have been installed, and five groundwater monitoring wells have been regularly monitored. One groundwater monitoring well was destroyed during tank removal activities. 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 are two inactive public supply wells within 1,000 feet east (crossgradient) of the Site. San Jose Water Company Municipal Wells 1 and 2 are located approximately 550 feet east, and 365 feet southeast, respectively, of the Site; both wells are crossgradient of the groundwater flow direction.

No other water supply wells have been identified within 1,000 feet of the Site. According to GeoTracker there are no nearby impacted wells. 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 seven of eight Policy general criteria. Secondary source has not been removed to the extent practicable.
- **Groundwater Specific Criteria:** The case does not meet Policy criteria for groundwater. Although the plume cannot be delineated to the south due to the presence of Highway 101, the estimated plume length is less than 250 feet. The dissolved benzene concentrations in the source area exceed the Policy threshold of 3,000 micrograms per liter ( $\mu\text{g/L}$ ) for a plume length of less than 250 feet.
- **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 ( $\mu\text{g/m}^3$ ), 3,600  $\mu\text{g/m}^3$ , and 310  $\mu\text{g/m}^3$ , at a depth of five feet (Innovex, 2014). These levels meet the Commercial soil gas criteria.
- **Direct Contact and Outdoor Air Exposure:** This case meets Policy Criterion 3b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional evaluation of site-specific risk from potential exposure to residual soil contamination was completed by Fund staff. The results of the evaluation found that maximum concentrations of petroleum constituents remaining in soil will have no significant risk of adversely affecting human health. No soil samples collected at 5 feet below ground surface (bgs) were submitted for laboratory analysis, however, photoionization device (PID) readings of soil samples collected at five feet bgs during soil vapor probe installation indicated no hydrocarbon vapors. In addition, maximum concentrations in soil samples collected between 5 and 10 feet bgs are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. The Site is paved, and accidental exposure to site soils is prevented. Therefore, the pathway is incomplete. Any construction crew performing subsurface work will, per the requirements of Title 8 of the California Code of Regulations, be prepared to deal appropriately with environmental hazards anticipated or encountered in their normal daily work. The presence of residual contamination should be taken into account when issuing and executing excavation or building or other permits at the Site, including but not limited to the inclusion of a competent person in the work crew.

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

The County objects to UST case closure (Low Threat Closure Checklist dated November 23, 2015) because

- **Comment:** Secondary source has not been removed to the extent practicable. Only a pilot test was conducted. Wells were undersized and the DPE test was not effective.  
**Response:** State Water Board staff agree. The feasibility of DPE was not adequately evaluated due to the small diameter of the extraction wells.
- **Comment:** The case does not meet any of the Groundwater specific criteria scenarios.
- **Response:** State Water Board staff agree; benzene concentrations in the source area continue to exceed 3,000  $\mu\text{g/L}$ , the Policy threshold for a plume estimated to be less than 250 feet long. In addition, the October 2015 groundwater sampling results indicated a significant increase in dissolved petroleum hydrocarbon concentrations in monitoring wells MW-4 and MW-5; therefore the plume concentrations are not stable.

**Recommendation**

State Water Board staff concur with the County's directive dated November 24, 2015 which requested a Remedial Action Plan (RAP). State Water Board staff recommend:

- The RAP should address remediation of the remaining secondary source, the limitations associated with site conditions, and method to maximize remediation effectiveness.
- The RAP should address remediation of the elevated dissolved petroleum hydrocarbons in groundwater. Focused remediation should be performed in the source area to achieve Policy guidelines in a timely manner.
- The RAP should be implemented.
- Continue groundwater monitoring on a semiannual basis.

The recommended Fund budget category for this claim is: CAP/REM – Corrective Action Plan/Remediation.

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