

State Water Resources Control Board

UST CASE CLOSURE SUMMARY

Agency Information

Agency Name: San Mateo County Health Systems (County)	Address: 2000 Alameda del las Pulgas, Suite 100 San Mateo, CA 94403
Agency Caseworker: Mr. Jacob Madden	Case No.: 550197

Case Information

USTCF Claim No.: N/A	Global ID: T0608152226
Site Name: Bressie & Co.	Site Address: 600-790 Dubuque Avenue South San Francisco, CA 94080 (Site)
Responsible Parties: Project 101 Associates c/o David Bressie	Address: 500 3 rd Street, Suite 505 San Francisco, CA 94107-1814
USTCF Expenditures to Date: None	Number of Years Case Open: 7

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608152226

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 Site has a long history of commercial and industrial uses. Between 1925 and 1961 a steel foundry was operated at the Site. Circa 1960 the industrial buildings and equipment associated with the steel foundries were removed and replaced with warehouse type buildings. The Site is currently a 47,480 square foot parcel developed with a Lowe's retail home improvement store (Lowe's store), a West Marine boat shop, and paved parking areas.

A release was discovered during May 2007, when two 10,000 gallon fuel oil underground storage tanks (USTs) (Tank-1 and Tank-2) were excavated and removed from the property during surface grading activities for the construction of the Lowe's store. During UST removal activities, approximately 10,000 gallons of water and fuel oil was removed from Tank-1. Additionally, approximately 520 tons of petroleum impacted soil and approximately 15,000 gallons of water and petroleum constituents were removed from areas near the excavation and disposed of off-site. During 2007, maximum concentrations of petroleum hydrocarbons as gasoline, diesel, and motor oil (TPHg, TPHd, and TPHmo) were detected in tank pit soil samples at respective concentrations of 570 milligrams per kilogram (mg/kg), 18,000 mg/kg and 15,000 mg/kg.

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600-790 Dubuque Avenue, South San Francisco

Residual soil and groundwater contaminants consist primarily of semi-volatile petroleum constituents. Residual immobile petroleum constituents, including apparent free product beneath portions of both the building and parking lot, remain in the silty sand and clay soil between approximately 5 and 10 feet below ground surface.

Groundwater monitoring data collected between 1990 and 2013 demonstrates that the petroleum constituent plume, associated with Tank 1 and Tank 2, does not extend off-site. One groundwater monitoring well, MW-12, remains on-site. A secondary source of petroleum constituents exists in soil and groundwater, only monitored by the one remaining monitoring well, MW-12. Free product and concentrations of free product were detected in areas beneath both the building and parking lot, and free product thicknesses were reported in the lone remaining monitoring well, MW-12, up to 0.3 feet during 2010 and 2011. An absorbent sock was installed in MW-12 during March 2011 to skim residual free product sheen from groundwater which likely affected the immediate area of MW-12. No measurable thickness of free product has been encountered in well MW-12 since installation of the passive skimmer. The December 2013, groundwater sampling event indicated that TPHg, TPHd, and TPHmo were detected in groundwater at respective concentrations of 67 micrograms per liter ($\mu\text{g/L}$), 3,200 $\mu\text{g/L}$ and 3,500 $\mu\text{g/L}$. No other petroleum contaminants were detected in MW-12 during the sampling event.

Non-petroleum contaminants acetone and 2-butanone (MEK), have also been reported in soil and groundwater in the vicinity of the former UST excavation for Tank-1 and Tank-2. During UST removal activities, only low concentrations of acetone and MEK were reported in two out of five soil samples collected and the groundwater sample collected within the UST excavation reported non-detectable concentrations of both acetone and MEK. Concentrations of acetone and MEK have been reported in soil and groundwater at several locations throughout the parcel. Contaminant concentrations for acetone and MEK were all below San Francisco Bay Regional Water Quality Control 2013 Tier 1 Environmental Screening Levels. The source of the non-petroleum contaminants in soil and groundwater does not appear to have originated from Tank -1 and Tank-2, therefore potential corrective actions related to the cleanup of non-petroleum contaminants are not addressed in this UST Case Closure Summary.

The affected groundwater is not currently being used as a source of drinking water or for any other designated beneficial use. There are no surface water bodies or supply wells within 1,000 feet of the plume boundary. Public supply wells are usually constructed with competent sanitary seals and intake screens that are in deeper more protected aquifers.

Remaining petroleum constituents are limited, stable, and declining. While some corrective actions have been implemented, an unknown amount of free product appears to remain beneath the building and parking lot. However, it is the opinion of State Water Resources Control Board (State Water Board) staff that additional corrective action at this time would be unnecessary and costly. Additional assessment/monitoring will not likely change the conceptual site model. Any remaining petroleum constituents do not pose significant risk to human health, safety or the environment, other than potential construction workers, given the current land use.

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 3**. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. Semi-volatile

petroleum constituents are present below the site where the release originated, but do not extend off-site and have been removed to the maximum extent practicable. The plume has been stable or decreasing for a minimum of five years. The nearest existing water supply well and surface water body are greater than 1,000 feet from the defined plume boundary. Based on an analysis of Site specific conditions, under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives (WQOs) will be achieved within a reasonable time frame. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.

- Petroleum Vapor Intrusion to Indoor Air – Site meets **CRITERIA (2) a, Scenario 4**. Direct soil gas sampling was conducted at various locations beneath the current building. Concentrations of benzene, ethylbenzene, and naphthalene in soil gas samples collected at five feet are below commercial soil gas screening levels for a site with no bioattenuation zone.
- Direct Contact and Outdoor Air Exposure – Site meets **CRITERIA (3) a**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy.

Objections to Closure

The County staff objects to UST case closure because:

1. Free product has not been removed to the maximum extent practicable.
RESPONSE: While an unknown amount of free product appears to remain beneath the building and parking lot, it is the opinion of State Water Board staff that additional corrective action at this time would be unnecessary and costly. Semi-volatile petroleum constituents have been present in monitoring well MW-12 since 2010. An adsorbent sock has been used to skim free product sheen present in the well since 2011. Approximately, one gallon of product has been recovered by the socks between 2011 and 2014. Remaining contamination exists as immobile non-aqueous phase-liquid in soil and groundwater. The soil vapor assessment completed during 2012 indicated that petroleum constituents beneath the site do not poses a vapor intrusion risk.
2. Secondary source is not removed to the extent practical.
RESPONSE: Concentrations of TPHg, TPHd, and TPHmo have been decreasing over time in the source area, indicating that any residual petroleum constituents pose a low threat to human health, safety, and the environment. Soil samples collected during 2010 and 2012 were non-detect for benzene, ethylbenzene and naphthalene, meeting table 1 criteria for Direct Contact and Outdoor Air Exposure. Sub-slab soil vapor samples collected throughout the building in November 2012 were non-detect for benzene, ethylbenzene and naphthalene, demonstrating that there is not a soil vapor intrusion risk from the residual contamination left in place. The secondary source is located beneath the concrete foundation of the Lowe's store constructed during 2007 and under the parking lot. While this unknown amount of secondary source appears to remain beneath the building and parking lot, it is the opinion of State Water Board staff that additional corrective action at this time would be unnecessary and costly. The petroleum constituent plume, associated with Tank 1 and Tank 2, does not extend off-site. The secondary source does not pose a threat to human health.

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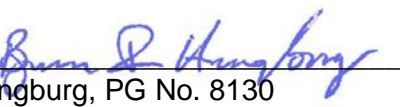
Recommendation for Closure

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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9/15/14

Date

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9/15/14

Date