

State Water Resources Control Board

REVIEW SUMMARY REPORT – ADDITIONAL WORK FIFTH REVIEW – JULY 2014

Agency Information

Agency Name: Solano County Department of Resource Management (County)	Address: 675 Texas Street, Suite 5500, Fairfield, CA 94533
Agency Caseworker: Misty Kaltreider	Case No.: 60054

Case Information

USTCF Claim No.: 15922	GeoTracker Global ID: T0609500404
Site Name: Dixon Laundry	Site Address: 310 S. Jackson Street, Dixon, CA 95620
Responsible Party: Joe & Sally Chang Trust Attn: Linda Chang	Address: Private address
USTCF Expenditures to Date: \$569,541	Number of Years Case Open: 22

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500404

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 a former wet commercial laundry and residence. An unauthorized release was reported in October 1992 after the removal of a 350-gallon gasoline UST. Approximately 80 cubic yards of impacted soil were removed and disposed offsite in 1992. Dual phase extraction (DPE) was conducted between April 2006 and September 2006, which reportedly removed approximately 78 pounds of total petroleum hydrocarbons as gasoline (TPHg) and approximately 34,000 gallons of contaminated groundwater. Active remediation has not been conducted at the Site for the past eight years. DPE has been proposed and recently approved for reuse at the Site. Since 2001, ten groundwater monitoring wells have been installed and irregularly monitored.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there is one public supply well approximately 800 feet northwest and upgradient of the projected plume boundary. There are no surface water bodies within 1,000 feet of the projected plume boundary. A downgradient irrigation well has been identified within approximately 400 feet of the 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 groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable

future. Other designated beneficial uses of impacted 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 meets seven of the Policy general criteria. Free product is still measurable at the Site and needs to be removed to the maximum extent practicable.
- **Groundwater Specific Criteria:** The case does not meet all of the characteristics of one of the five classes under the groundwater specific criteria because there is an irrigation well located within 1,000 feet downgradient from the projected plume boundary. There are also two public water supply wells, within 1,000 feet but upgradient of the projected plume boundary. In addition, benzene concentrations in downgradient well MW-8 have increased.
- **Vapor Intrusion to Indoor Air:** The case meets Policy Criterion 2b. A site-specific risk assessment of potential exposure to petroleum constituents as a result of vapor intrusion (*Downgradient Site Assessment & Second Half 2011 GW Monitoring Report, 2011*) found that maximum concentrations of petroleum constituents remaining in soil and groundwater will have no significant risk of adversely affecting human health.
- **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

The County objects to UST case closure (March 11, 2014 letter) because:

- Free product still exists at the Site and the case therefore does not meet all of the conditions under the General criteria of the Policy.
RESPONSE: The Fund agrees and concurs with the County's directive to the Responsible Party (RP) to aggressively remediate the source area including removal of any residual free product.
- Secondary source needs to be removed.
RESPONSE: The Fund notes the presence of measurable free product at the Site and agrees.

Recommendation

Reuse of DPE has been approved recently by the County to target contamination in the source well. While, the Fund concurs with the use of DPE to manage source well contamination, the Fund recommends that the County also ensure that the proposed remediation leads to decreasing concentration trends over time in MW-8.

S.P.L. 7/3/14
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