
Central Valley Regional Water Quality Control Board

12 June 2020

PUBLIC NOTICE

CASE CLOSURE CONSIDERATION, UNDERGROUND STORAGE TANK RELEASE, FORMER BRITTON FERTILIZER, 7155 NORTH WASHOE AVENUE, FIREBAUGH, FRESNO COUNTY, RB CASE 5T10000891

To: Offsite Property Owners and Other Interested Persons

This letter is to inform interested parties of the Central Valley Regional Water Quality Control Board's (Central Valley Water Board) consideration of closing the subject case, and to request comments from interested parties regarding the proposed closure at the above listed property (Site).

The Site is currently operated as a trucking facility, with a large truck repair shop and an office adjacent to the former Underground Storage Tank (UST) location. There are no longer any USTs at the Site.

During initial site investigations related to a 1,000-gallon gasoline UST removal conducted at the Site in 2009-2010, petroleum constituents were detected in soil and groundwater. Multiple phases of site investigations were conducted at the Site between 2009 and 2014, to evaluate the case for closure in accordance with the criteria contained in the *Low-Threat Underground Storage Tank Case Closure Policy* (Policy).

Analytical results of samples from soil borings and groundwater monitoring wells indicated significant concentrations of gasoline constituents in the subsurface soil and groundwater.

Groundwater monitoring wells MW-1 through MW-5 were sampled from January 2012 through November 2014. MW-4 was destroyed during a remedial excavation on 14 June 2016, and the remaining four wells were sampled until June 2017. The approximate depth to groundwater was 12 to 13 feet below ground surface (bgs), and the direction of flow was generally to the southwest. Analytical result of samples collected from monitoring wells MW-1 (downgradient) and MW-4 (source area) indicated petroleum impacts to groundwater. Petroleum hydrocarbons were not detected in wells MW-2, MW-3, and MW-5.

Initially, six inches of floating petroleum product was detected in MW-4. An absorbent sock was placed in the well in February 2014, and approximately three gallons of

product were removed within six hours. Product sheen remained in MW-4 after the removal, however no product or sheen was noted in any of the wells since November 2014.

Two borings were drilled in March 2013, and soil vapor probes installed to depths of 5 and 10 feet bgs. Vapor probe VP-1 was installed between the tank excavation and an office within the adjacent shop building. Probe VP-2 was installed within the former UST excavation. Analytical results of soil samples collected from depths of one, five, and ten feet in VP-1 indicated concentrations of total petroleum hydrocarbons as gasoline (TPHg) of 4.3 milligrams per kilograms (mg/kg), non-detect (ND), and 49 mg/kg; benzene of 0.32 mg/kg, 0.24 mg/kg, and 1.1 mg/kg; ethylbenzene of 0.053 mg/kg, 0.22 mg/kg, and 2.2 mg/kg, and naphthalene of 0.086 mg/kg, ND, and 1.7 mg/kg, respectively. Analytical results of soil samples from depths of five, seven, and ten feet in VP-2 indicated concentrations of TPHg of ND, ND, and 75 mg/kg; benzene of ND, ND, and 1.3 mg/kg; ethylbenzene of ND, ND, and 3.2 mg/kg, and naphthalene of ND, ND, and 2.3 respectively.

In March and December 2013, analytical results of the soil vapor samples from depths of five and ten feet bgs from VP-1 contained elevated concentration of benzene and ethylbenzene. The samples collected from VP-2@10 feet also contained elevated concentration of benzene and ethylbenzene. Naphthalene was not detected in any soil vapor sample. Oxygen was measured at 8% in VP-1@5', and at less than 4% in all the other probes.

In June 2016, remedial action, including soil excavation and confirmation soil sampling, was conducted in the former UST location. The excavation extended to a depth of 14 feet, with lateral dimensions of approximately 42 by 18 feet. Approximately 490 cubic yards of gasoline impacted soil was excavated, and several sidewall and floor confirmation soil samples were collected. The excavation was backfilled with clean soil. Groundwater was not encountered. Monitoring well MW-4 and soil probe VP-2 were destroyed during the excavation. Based on the information provided in the Report, it appeared that most of the gasoline impacted soil had been excavated and disposed of properly. Remaining concentrations of petroleum hydrocarbons in the sidewall and floor samples were less than the threshold limits contained in Table 1 of the Policy.

In March 2017, analytical results of additional soil vapor samples indicated elevated contaminant concentrations in VP-1 at 5 and 10 feet bgs.

In a letter dated 27 November 2017, Central Valley Water Board Staff concurred that all eight general criteria, and the groundwater and shallow soil media specific criteria have been satisfied. Due to the significant concentrations of soil vapors that exceed criteria contained in the Policy, Staff recommended additional soil vapor assessment, before case closure could be considered.

Additional soil excavation and confirmation soil sampling was conducted in the area of VP-1 in May 2018. The excavation extended to a maximum depth of 14 feet, with lateral dimensions of approximately 50 feet by 40 feet. Groundwater was not encountered during the excavation process. The total volume of excavated soil was approximately

960 cubic yards of gasoline impacted soil. Based on the information provided, it appears that most of the gasoline impacted soil was excavated and remaining petroleum constituents were less than the threshold limits contained in Table 1 of the Policy.

Soil vapor well VP-1 was destroyed during excavation and a replacement vapor well (VP-1B) was installed in the backfilled area of the excavation, near the location of the former soil vapor well VP-1. Dual-nested soil vapor probes were installed in the boring at 5 and 10 feet, in the center of one-foot thick sand filter packs.

Soil vapor samples were collected from VP-1B until June 2019. Petroleum constituent concentration in VP-1B @5 feet meets the Policy criteria; however, continued to exceed the Policy criteria for benzene and ethylbenzene at 10 feet. Additional soil vapor samples collected on 21 February 2020, indicated that the concentrations of benzene, ethylbenzene, and naphthalene in vapor samples from well VP-1B@5 feet did not exceed concentrations contained in Appendix 4, Scenario 4 of the Policy for commercial exposure with no bio-attenuation zone. However, the concentrations of benzene detected at 10 feet exceed concentrations allowed in Appendix 4, Scenario 4 of the Policy for commercial exposure with no bio-attenuation zone.

The soil gas analytical results at VP-1B@5 feet have consistently met the Policy criteria for the last three sampling events since August 2018. In addition, benzene concentrations in VP-1B@10 feet decreased from 1,400,000 $\mu\text{g}/\text{m}^3$ in March 2013 to 7,800 $\mu\text{g}/\text{m}^3$ in February 2020. Similarly, ethylbenzene concentrations in VP-1B@10 feet decreased from 120,000 $\mu\text{g}/\text{m}^3$ in March 2013 to 1,400 $\mu\text{g}/\text{m}^3$ in February 2020. This decrease in concentrations indicates that residual vapor contaminants still exist, but continue to naturally attenuate. The primary and secondary contaminant source has been removed, and there is no evidence of additional sources or mass remaining in soil. The attenuation of soil gas concentrations significantly increases with short vertical distance.

Based on the contaminant concentration in VP-1B@5 feet that meets the criteria contained in the Policy, and the decreasing concentration at the 10-foot depth, indicates attenuation is occurring. It is Central Valley Water Board Staff opinion that the Site meets the petroleum vapor intrusion to indoor air criteria contained in the Policy, and no further action is required.

A sensitive receptor survey was submitted on 16 May 2017. The nearest existing surface water body is the Outside Canal, located approximately 730 feet northeast of the Site. The nearest supply well is over 1,000 feet from the Site. An irrigation district monitoring well is located approximately 700 feet northeast of the Site.

The interested party survey report dated 16 May 2017, listed property owner names and mailing addresses, business and residence mailing addresses, and assessor's parcel numbers for all properties overlying and adjacent to the impacted property, with contact information for the municipal water district, environmental health department, and building department. Central Valley Water Board Staff updated the list.

This case has been evaluated for closure based on the information presented in the case file, and the criterion contained in the Policy. Central Valley Water Board Staff

conclude that the Site meets closure criteria contained in the Policy. The contaminant plume in groundwater and soil appears to be stable and/or decreasing. Any remaining petroleum hydrocarbons should continue to naturally attenuate and not adversely impact environmental quality, the beneficial uses of groundwater, or pose an unacceptable risk to human health. All technically and economically feasible cleanup has been completed.

This public Notice has been transmitted to interested parties in the area, as well as posted on the [Central Valley Water Board's Public Notices web page](http://www.waterboards.ca.gov/centralvalley/public_notices/) (http://www.waterboards.ca.gov/centralvalley/public_notices/), under Public Notice, Underground Storage Tank – Decisions Pending, & Case Closures.

You may participate in the case closure process by reviewing technical reports, asking questions, and providing comments on the proposed case closure. Details of the Site assessment are also available to interested parties through the State Water Board's [GeoTracker website](http://geotracker.waterboards.ca.gov/) (<http://geotracker.waterboards.ca.gov/>).

The Central Valley Water Board case number is **5T10000891**. Information may also be reviewed at the Central Valley Water Board office at 1685 E Street, in Fresno, California.

Please submit comments regarding the proposed case closure to the Central Valley Water Board's Fresno office by **12 August 2020**.

Interested parties with questions or comments regarding the site or our proposed actions should contact the case worker, Khalid Durrani, at the above address, at (559) 445-6191 or by email Khalid.Durrani@waterboards.ca.gov.

Upon completion of the public comment period, and in the absence of substantive comment against closure being granted, Central Valley Water Board staff will proceed with the closure process for the case.