## **RESPONSE TO ALAMEDA COUNTY COMMENTS**

## **GUTHMILLER TRUCKING, INC. CLOSURE CLAIM 1251**

<u>Comment 1</u>: Secondary source has not been removed to the extent practicable. In 1996, the RP proposed soil excavation in the vicinity of the tank complex; however, the source removal was never implemented due to funding issues.

<u>Response</u>: Approximately 750 cubic yards of soil were excavated and removed in 1986. An additional 380 cubic yards of impacted soil were excavated and removed in 1998. Additionally, 240 pounds of oxygen release compound were used at the tank excavation and 40,000 gallons of contaminated water removed from the tank excavation. These actions have met the Policy defined criteria for Secondary Source Removal.

<u>Comment 2</u>: In a 1996 report two irrigation/domestic water supply wells were reported to be approximately 300-500 feet from the former underground storage tanks (USTs), on the adjacent property. In addition, it appears that a survey to identify other sensitive receptors, including surface water bodies, was never conducted.

<u>Response</u>: No water supply wells and no surface water have been identified within 250 feet of the defined plume boundary. Furthermore, the adjacent property in question is located to the north-northeast, cross-gradient of the Site.

<u>Comment 3</u>: The lateral and vertical extent of groundwater contamination has not been defined. <u>Response</u>: The petroleum hydrocarbon constituents that exceed water quality objectives are less than 100 feet in length. The contaminants at the site are petroleum hydrocarbons, which are less dense than water. Soil in the vicinity of the Site generally consists of silt and clay with relatively thin layers of sand or gravel. Silt and clay are low permeability materials, resistant to groundwater flow. Vertical definition is not required.

<u>Comment 4</u>: The stability of the plume is unknown since groundwater sampling has not occurred since June 2009 (sic) and increasing concentrations of TPHg and benzene were observed in the two most recent samples collected from well MW-8R.

<u>Response</u>: Variations in concentration reported in well MW-8R are consistent with seasonal variations. Each of the five historical detections of benzene in well MW-8R in excess of 1,000 micrograms per liter ( $\mu$ g/L) and both of the historical detections of TPHg in well MW-8R in excess of 10,000  $\mu$ g/L have occurred in the first half of the calendar year in which they were reported. Though concentrations of benzene did increase in the last two sampling events, concentrations decreased the previous two sampling events, increased the three prior events, and decreased the two events before that. The overall trend is one of stability.

<u>Comment 5</u>: The current magnitude of groundwater contamination in the source area remains unknown as no wells are located within the footprint of the former UST complex. <u>Response</u>: Groundwater contamination in the source area is defined to the Water Quality Objectives. Furthermore, the most recent grab groundwater sampling event, conducted in 2007, reported concentrations of benzene within the footprint of the former UST complex below 100  $\mu$ g/L.

<u>Comment 6</u>: An evaluation of the risks posed by the elevated concentrations of petroleum hydrocarbons in shallow soils and groundwater (in the source area) is incomplete. <u>Response</u>: The closest building is located approximately 40 feet upgradient from the nearest edge of the former UST complex and approximately 20 feet upgradient from well MW-8R and boring HP-14. An evaluation of the risks posed by the remaining concentrations of hydrocarbons was conducted by Fund staff, as noted in the Review Summary Report dated July 3, 2013. Further explanation is provided below in the response to Comment 8. In short, sub-slab vapor samples report benzene concentrations lower than the environmental screening level (ESL), a conservative screening tool.

<u>Comment 7</u>: The recommendations of the Review Summary Report conflict with those of the preliminary 5-Year Review conducted in 2010, yet no further work has been performed. Whereas the 2010 review stated that the CSM was incomplete, the more recent report states that the CSM is complete.

<u>Response</u>: Since 2010, the Low Threat Closure Policy (Policy) has been adopted and implemented. Furthermore, the sub-slab sampling report had not been uploaded to GeoTracker at the time of our 2010 review. This case meets Policy Criteria.

<u>Comment 8</u>: The Media-Specific Criteria for Petroleum Vapor Intrusion to Indoor Air has not been met. Boring HP-14 and monitoring well MW-8R, which are located in close proximity to an existing building, have documented benzene concentrations in groundwater as high as 18,000 ppb and 3,500 ppb, respectively. Additionally, shallow soil samples collected from borings (HP-14 and MW-2), located in close proximity to an existing building, have documented TPH concentrations ranging from 450 mg/kg to 3,750 mg/kg. Furthermore, a sub-slab soil vapor sample collected in April 2010 reported concentrations in excess of the appropriate ESL (2.8 micrograms per cubic meter [ $\mu$ g/m<sup>3</sup>]) for sub-slab vapor samples.

<u>Response</u>: ESLs are not established policy or regulation and are not regulatory cleanup standards. ESLs are conservative screening tools. Never the less, the sub-slab sampling data satisfies ESLs. The San Francisco Bay Regional Water Quality Control Board Lookup Tables dated May 2013 report that the vapor screening level for benzene is 420  $\mu$ g/m<sup>3</sup>. The highest reported concentration of benzene reported during the sub-slab sampling was 16  $\mu$ g/m<sup>3</sup>. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to petroleum constituents as a result of vapor intrusion found there to be no significant risk of petroleum vapors adversely affecting human health. The Media-Specific Criteria for Petroleum Vapor Intrusion to Indoor Air is met via Policy Criterion 2b.