# **County of Santa Clara**

Department of Environmental Health

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September 19, 2013

Ms. Vivian Gomez-Latino (USTClosuresComments@Waterboards.ca.gov) State Water Resources Control Board 1001 I Street, P.O. Box 2231 Sacramento, California 95814

Subject: Comment Letter – UST Case Closure Summary and Proposed Case Closure

Fuel Leak Investigation at Spartan Gas, 1415 Oakland Road., Case No. 06-073, SCVWDID #06S1E32D01f

Dear Mr. Mizera:

The Department of Environmental Health (DEH) received your Notice of Opportunity for Public Comment on the proposed UST case closure for the site referenced above (signed on July 10, 2013). In addition, the DEH has reviewed the UST Case Closure Summary prepared by the State Water Board and signed on July 3, 2013. The DEH's comments are listed after the State Board's statements.

### **Issue 1**

**State Board Statement** – The contaminant plume that exceeds WQOs from the on-site source has migrated beneath the parking lot for the adjacent school property.

**DEH Comment** – A preschool through 8<sup>th</sup> grade elementary school is located on the downgradient site of the referenced site at 711 East Gish Road. Contamination which originated on the referenced site has migrated beneath the school property. During the most recent groundwater sampling event up to 2,500 parts per billion (ppb) TPH-g and 1,200 ppb TPH-d were detected in monitoring well AS-30B which is located on the school property. In addition, up to 6,200 ppb TPH-g, 2,700 ppb TPH-d and 170 ppb benzene were detected in monitoring well MW-21A which is located along the referenced site's downgradient property line. Groundwater at this location flows beneath the school property.

## Issue 2

**State Board Statement** – During 2012, elevated benzene concentrations were detected in wells AS-11A and AS11B to the south of AS-30B and west of the former USTs. However, concentration trends are stable or decreasing in these wells. The plume is stable or decreasing.

**DEH Comment** – Gradient maps indicate that the groundwater flow direction varies and that in the southern portion of the site groundwater flows periodically to the west. The site is underlain by two water bearing zones. At this time the A and B zones are not defined. In the A-zone, there are no groundwater monitoring wells located to the west of well AS-11A. Consequently, contamination in the A-zone is not defined in the downgradient direction.

In the B-zone, well MW-1 is located to the west of well AS-11B. The DEH notes that well MW-1 is screened across the A and B water bearing zones from 11 to 31 feet below ground surface (bgs). Well AS-11B is screened from 37.5 to 40 feet bgs. The wells are screened in different zones. Consequently, well MW-1 should be evaluated to determine if it is evaluating the B-zone groundwater downgradient of well AS-11B. In addition, the well should be evaluated to determine if it has caused cross contamination between two water bearing zones. To be clear MW-1 should be evaluated and if appropriate replaced with a properly constructed B-zone well.

#### Issue 3

State Board Statement – Free product was observed since 2008 directly beneath the former USTs in wells AS-8B, and AS-23B and in the downgradient well MW-19A. During 2012 free product thickness in wells AS-8B, AS-23B, and MW-19A were 0.02 feet, 0.04 feet, and 0.85 feet, respectively. No free product has ever been reported off-site. Free product has been removed to the maximum extent practicable. Further remediation is not necessary.

**DEH Comment** – Free product is currently present in three wells. The most recent groundwater monitoring report (June 26, 2013) reported that free product thickness had increased in well AS-23B. The thickest free product was reported in well MW-19A which is located near the down gradient property line and approximately 8 feet from the adjacent school property. Groundwater at this location flows beneath the school property.

After some of the contaminated soil was removed from the site in 1999, significant soil and groundwater contamination remained. In 2006 a soil vapor extraction system operated between June and December. It was reported that the system removed minimal hydrocarbon mass due to the inefficient design of the piping system. Free product has been noted in three wells. In 2012, 0.85 feet of free product was measured in well MW-19A located upgradient of the adjacent school. No efforts have been made to remove product from this well. Free product has not been removed to the extent practicable.

The DEH believes that additional remediation is required to mitigate the hydrocarbon plume and decrease free product thickness. Additional remediation will improve groundwater quality,

decrease off-site migration of contaminants beneath the school and accelerate the time to meet water quality objectives.

#### **Issue 4**

**State Board Statement** – Maximum petroleum constituent plume length above WQOs: Benzene plume is approximately 230 feet in length.

**DEH Comment** – The State Board concludes that because the benzene plume was determined to be less than 250 feet in length the site meets the class 3 criterion outlined in the Low Threat Closure Policy. Class 3 criterion include the following requirement: "the contaminant plume that exceeds water quality objectives is less than 250 feet in length." The plume length is based on all contaminants and should not be limited to benzene. The DEH notes that the most recent groundwater monitoring report (June 26, 2013) noted contaminant concentrations outside of the geographic limits of the benzene plume. In the A-zone 1,100 ppb TPH-g was detected in well AS-11A located in the southern portion of the site. In the northern portion of the site 120 ppb TPH-g was detected in well MW-17A. The plume extends beyond both of these wells indicating that that plume exceeds 250 feet in length. Consequently, the site does not currently meet the class 3 criterion.

If you have any questions, please feel free to contact the Site Mitigation Program's Manager Michael Balliet at (408) 918-1976 or the Environmental Health Geologist Gerald O'Regan at (408) 918-1974.

Sincerely,

Jem Blamey

Jim Blamey

**Acting Director** 

cc: Nathan King, Regional Water Quality Control Board - SF Bay

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