DIVISION OF WATER QUALITY RESPONSE TO COMMENTS ON THE PROPOSED UST CASE CLOSURE OF SPARTAN GAS 1415 OAKLAND ROAD, SAN JOSE (SITE)

We received one comment letter during the public comment period, which ended on September 20, 2013 at noon. The comments and our responses are presented here.

Comment letter received:

1. Santa Clara County Department of Environmental Health

COMMENT 1: A preschool through 8th 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.

RESPONSE: State Water Board staff agrees that the plume has migrated beneath a parking lot on the school property that is adjacent to the site. This plume of petroleum impacted groundwater has been stable for over 5 years, meets all of the Policy criteria, and does not present a risk to the students or staff at the school.

COMMENT 2: 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 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.

RESPONSE: Contaminant concentrations in well AS-11A are decreasing and provide delineation of the plume downgradient of the Site. The B-zone is delineated by wells AS-28B and MW-1. Contaminant concentrations in MW-1 and AS-28B have been low to non-detect since 2007 and 2010, respectively. Any cross contamination of aquifers that may be occurring due to improperly screened wells will cease when the wells are destroyed at the time of case closure.

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COMMENT 3: 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 (WQOs).

RESPONSE: No measurable free product has ever been detected in the off-Site wells. During 1999, approximately 2,162 cubic yards of contaminated soil was excavated to depths between 14-16 feet bgs. An air sparging/vapor extraction system was operated at the Site from June-December 2006. Approximately 6 gallons of petroleum hydrocarbons were removed from the Site. Groundwater Monitoring/Remediation Summary Report Fourth Quarter 2006 indicates that the vapor extraction system was shut down after reaching an asymptotic mass removal rate. The low mass recovery from the SVE system demonstrates that the residual petroleum is either non-volatile or non-mobile. In either case, free product has been removed to the extent practicable.

COMMENT 4: State Board staff 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 includes the following requirement: "the contaminant plume that exceeds WQOs 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.

RESPONSE: State Board Staff agrees with Santa Clara County that the “First Semi-annual Groundwater Monitoring Report 2013” indicates that contaminant plume is greater than 250 feet in length however, the estimated plume boundary for all contaminants is less than 500 feet in length and post remedial concentrations demonstrate that petroleum constituents in groundwater have been stable to decreasing for a minimum of five years.
Free product has been removed to the extent practicable, is stable to decreasing, and does not extend off-Site. The nearest existing water supply wells or surface water body is greater than 1,000 feet from the estimated plume boundary. The property owner is willing to accept a land use restriction if required by the regulatory agency.

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The State Board staff has determined that based on an analysis of site specific conditions that under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health, safety, and the environment; and water quality objectives will be achieved within a reasonable time frame. Therefore, the site meets Groundwater-Specific Criteria Class 5.