STATE WATER RESOURCES CONTROL BOARD (STATE WATER BOARD)
DIVISION OF WATER QUALITY RESPONSE TO COMMENTS ON THE
PROPOSED UST CASE CLOSURE OF TAMCO INTERPRISES,
1531 WEST 135TH STREET, GARDENA (Site)

We received one comment letter during the public comment period, which ended on March 6, 2015 at noon. The comments and our responses are presented here.

Comment letter received:

Commenter, represents the Golden State Water Company (GSWC)

COMMENT 1: GSWC, as opposed to the Metropolitan Water District of Southern California, which is incorrectly identified in association with General Criterion a of the 11/30/14 Low Threat Closure Policy checklist, owns and operates four public water-supply wells within a one-mile radius of the site (not including destroyed wells owned by GSWC). Two of these wells (Ballona 4 and 5) are located about 3,000 feet northeast (generally downgradient at times) of the subject UST site, and the other two wells (Southern 5 and 6) are located about 3,000 feet east (generally downgradient at times), based on Fall 2013 groundwater elevation contours for the principal aquifers in the area, which were obtained from the Water Replenishment District of Southern California (WRD).

RESPONSE: State Water Board recognizes that GSWC is the water provider for the Site. Metropolitan Water District of Southern California is the wholesale water provider for the Site. State Water Board agrees that GSWC's four public water supply wells are about 3,000 feet from the Site.

COMMENT 2: The uppermost perforations in these wells occur at 300 and 290 feet below ground surface (bgs) for GSWC's Ballona 4 and 5 wells, and at 420 and 400 feet bgs for GSWC's Southern 5 and 6 wells, or approximately 163, 153, 332, and 502 feet below mean sea level, respectively.

RESPONSE: State Water Board recognizes that the GSWC wells are 3,000 feet away and typically produce from below the Bellflower Aquiclude. This information was considered when we reviewed the case.

COMMENT 3: Based on data obtained from WRD and for the BP HITCO site at 1600 West 135th Street (http://geotracker.waterboards.ca.gov/profile_report.asp?global id=SL204791669), a downward vertical hydraulic gradient between the shallow unconfined aquifer and deeper drinking water aquifers exists in the area, which increases the threat to drinking water aquifers posed by contaminants released at the site.

RESPONSE: We agree that net downward vertical hydraulic gradients may exist in many portions of the Los Angeles area and that this generally increases the risk to drinking water aquifers. Normally, the Bellflower Aquiclude prevents flow from the surface downward in most areas of Los Angeles.

COMMENT 4: As described in the 12/12/2014 UST Case Closure Summary, and based on data for the BP HITCO site at 1600 West 135th Street and data obtained from WRO, at least one aquitard appears to exist between the shallow unconfined aquifer and deeper drinking water aquifers in the area, which may impede downward migration of contaminants that may have been released at the site.

RESPONSE: State Water Board agrees. The Bellflower Aquiclude is over 100-foot thick and is a continuous feature at the Site and in the regional area. The aquiclude provides a barrier to the downward migration of petroleum constituents to deeper, productive aquifers.

COMMENT 5: Regular sampling of GSWC's Ballona 4 well (CDPH Source ID = 1910155-043), Ballona 5 (CDPH Source ID = 1910155-069), Southern 5 well (CDPH Source ID =1910155-039), and Southern 6 well (CDPH Source ID = 1910155-045) since they were installed between 1988 and 2005, suggests that fuel-related organic compounds have not been detected in groundwater produced by the wells.

RESPONSE: We agree and considered this information during case review.

COMMENT 6: The 12/12/14 UST Case Closure Summary indicates that the site was operated as a vehicle maintenance facility, which is consistent with the presence of an oil interceptor and sump, as shown in the 1/29/99 Underground Storage Tank Removal Report. Because solvents have sometimes been used during vehicle maintenance operations and because of the limited publically available information, it is not clear if soil or groundwater samples have been collected and analyzed for chlorinated volatile organic compounds (VOCs), which have been detected in shallow groundwater near the southern edge of the site, at 1600 West 135th Street. Thus, it is unclear whether General Criterion b of the 11/30/14 Low Threat Closure Policy checklist has been met for the site.

RESPONSE: The commenter is correct. The *January 29, 1999 UST Removal Report* (Report) indicates that an oil interceptor and sump exist at the Site. No evidence in this Report indicates that the oil interceptor and sump were removed or investigated. The oil interceptor and sump are not the subject of the underground storage tank (UST) case closure. Site conditions meet all eight General Criteria of the Low-Threat Underground Storage Tank Case Closure Policy (Policy), including General Criterion b which requires that the unauthorized release consists only of petroleum.

COMMENT 7: According to the 1/29/99 Underground Storage Tank Removal Report, which may constitute the only contamination assessment-like documentation for the site, soil samples were collected from 4 feet beneath the former USTs (potentially about 14 feet bgs). However, it is unclear whether any

additional vadose zone samples were subsequently collected below the USTs and nearer to the water table, which was likely at a depth of about 30 feet bgs at the time based on data from the BP HITCO site at 1600 West 135th Street. In addition, it is unclear whether samples were collected beneath the fuel dispensers or piping, as indicated in Appendix B of the 1/29/99 Underground Storage Tank Removal Report. Thus, it is not clear if the extent of contamination documented beneath the former USTs has been determined and whether General Criterion e of the 11/30/14 Low Threat Closure Policy checklist has been met.

RESPONSE: The commenter is correct that the confirmation soil sampling results presented in the *January 29, 1999 UST Removal Report* are the only soil data for the Site. The sampling results indicated that low concentrations of total petroleum hydrocarbons as gasoline and total petroleum hydrocarbons as diesel were identified at approximately four feet below the former diesel UST during the USTs removal. Benzene and methyl tert-butyl ethyl were not detected in any of the soil samples. This normally indicates a low mass or weathered residual petroleum constituents. It is likely that the soil at 30 feet in the Bellflower Aquiclude has low permeability thus limiting contaminant mobility. It is likely that being a maintenance facility, the fuel dispensers were mounted on top of the USTs to save space; therefore, the confirmation samples under the USTs were also under the dispensers and piping.

COMMENT 8: Because of the limited amount of publically available information, it is not clear whether contaminated soil was excavated and removed from the site, so it is unclear whether General Criterion f of the 11/30/14 Low Threat Closure Policy checklist has been met.

RESPONSE: The commenter is correct that no contaminated soil was reported excavated at the Site. Confirmation soil samples indicated that low concentrations of residual petroleum constituents were detected in soil beneath the former USTs.

The Policy General Criterion (f.) states that "*...petroleum-release sites are required to undergo secondary source removal to the extent practicable as described herein. "To the extent practicable" means implementing a cost-effective corrective action which removes or destroys-in-place the most readily recoverable fraction of source-area mass.*" Underlined for emphasis. To remove all traces of residual petroleum constituents at this Site would require significant additional effort and cost. If complete removal of detectable traces of petroleum constituents becomes the standard for UST corrective actions, the statewide technical and economic implications will be enormous. For example, disposal of soils from comparable areas of excavation throughout the state would greatly impact already limited landfill space. In light of the precedent that would be set by requiring additional excavation at this Site and the fact that beneficial uses are not threatened and water quality exceeding water quality objectives at this Site is not likely, further corrective action is not necessary.

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COMMENT 9: The 11/21/13 UST Path to Closure Plan identifies impediments to site closure and indicates that a work plan be developed to define the extent of the release documented at the site. However, it is not clear from the limited publically available information whether site assessment activities have been performed. In particular, it is unclear whether potential impacts to groundwater from fuel contamination in soil have been evaluated at the Site. Thus, GSWC is unable to comment on potential impacts to drinking water aquifers in the area from operations at the subject site.

RESPONSE: The commenter is correct that no additional work has been reported completed since 1998. Previous reviews have recommended additional investigation. After a more detailed review of the existing Site data, given the low level of unauthorized release detected in the confirmation soil samples collected beneath the former USTs, the Site setting, and the natural attenuation of petroleum that occurs in the environment, it is highly unlikely that the low concentrations of residual petroleum constituents could leach to groundwater with sufficient mass to violate the Groundwater Media-Specific Criteria in the Policy. While there may be uncertainty about the exact extent of the release, additional work at the Site is unnecessary to protect human health and the environment.

GW Lockwood

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8/14/2015
Date