

November 10, 2015

VIA EMAIL to USTClosuresComments@waterboards.ca.gov

Ms. Vivian Gomez-Latino State Water Resources Control Board 1001 I Street, P.O. Box 2231 Sacramento, California 95812

Comment Letter - Chevron #9-8392, Proposed UST Case Closure

Golden State Water Company (GSWC) has received the State Water Resources Control Board's (SWRCB) "Notice of Opportunity for Public Comment Proposed Underground Storage Tank Case Closure, Chevron #9-8392 (Case No. R-37474)" letter dated September 4, 2015. Based on review of the publically-available documents related to the subject underground storage tank (UST) site (i.e., see http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603753543), GSWC respectfully offers the following comments:

- GSWC owns or operates five public water-supply wells within a one-mile radius of the site (not including destroyed or yet-to-be-activated wells owned by GSWC). One of these wells (Hawaiian 1) is located about 2,300 feet southeast of the subject UST site, three wells (Centralia 3, 4, and 6) are located about approximately 3,200 feet south (downgradient), and one well (Massinger 1) is located about 5,100 feet southwest (downgradient), based on Fall 2014 groundwater elevation contours for the principal aquifers in the area, which were obtained from the Water Replenishment District of Southern California (WRD).
- The uppermost perforations in these wells occur at 200 feet below ground surface (bgs) for GSWC's Hawaiian 1 well, 110, 110, and 180 feet bgs for GSWC's Centralia 3, 4, and 6 wells, respectively, and 160 feet bgs for GSWC's Massinger 1 well, or approximately 164, 75, 75, 146, and 121 feet below mean sea level, respectively.
- Regular sampling of GSWC's Hawaiian 1 well since 1988 (DDW Source ID = 1910004-010), Centralia 3 well since 1988 (DDW Source ID = 1910004-005), Centralia 4 well since 1985 (DDW Source ID = 1910004-006), Centralia 6 well since it was constructed in 2004 (DDW Source ID = 1910004-031), and Massinger 1 well since 1985 (DDW Source ID = 1910004-014) suggests that

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- fuel-related organic compounds have not been detected in groundwater produced by the wells.
- Based on data obtained from WRD, 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 at the site.
- Based on data obtained from Water Replenishment District of Southern California, a few aquitards appear to exist between the shallow unconfined aquifer and deeper drinking water aquifers in the area, which may impede downward migration of contaminants that have been released at the site.
- It is not clear whether groundwater samples that could be used to preclude the presence of deeper groundwater contamination have been collected below the 30-foot-deep monitoring wells at the site. Therefore, it is unclear whether the extent of contamination has been completely assessed and General Criterion e of the 4/2/14 Low Threat Closure Policy checklist has been satisfied.
- Groundwater flow directions at the site have varied over time from southwest
 to southeast. However, it is not clear whether installation and sampling of
 downgradient monitoring wells to the south-southeast of the former USTs, as
 described in the 8/15/07 Work Plan Addendum, occurred. Therefore, it is
 unclear whether the extent of contamination has been completely assessed
 and General Criterion e of the 4/2/14 Low Threat Closure Policy checklist has
 been satisfied.
- Based on the publically available information, it is not clear whether contaminated soil associated with the USTs was excavated and removed from the site. So, it is unclear whether General Criterion f of the 4/2/14 Low Threat Closure Policy checklist has been satisfied.
- Contaminant concentrations in groundwater near monitoring well MW-10 have declined between the first, December 2002, and last, April 2013 sampling events, which is consistent with a decline in groundwater elevations at the site between these sampling events. On the other hand, contaminant concentrations positively correlate with groundwater level fluctuations at the site, in that contaminant concentrations generally increase with increasing groundwater elevation and decrease with decreasing groundwater elevation. These observations suggest that, in the absence of other factors, contaminant concentrations may only be stable in so much as groundwater levels do not fluctuate and/or remain below any possible residual vadose zone soil contamination. Therefore, because concentrations may increase in the future if groundwater elevations increase significantly, it is unclear whether the Groundwater-Specific Criterion of the 4/2/14 Low Threat Closure Policy checklist has been satisfied.

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 Because it is unclear whether all of the General and Groundwater-Specific Criteria have been satisfied, as described in the 8/26/15 UST Case Closure Summary, GSWC is unable to comment on potential impacts to drinking water aquifers in the area from contamination at the subject UST site.

Should you have any questions, please contact me at (714) 535-7711, extension 355.

Sincerely,

Robert J. Collar, PG, CHG Senior Hydrogeologist

cc: George Lockwood, State Water Resources Control Board Noman Chowdhury, Los Angeles Regional Water Quality Control Board Tim Smith, Los Angeles County Department of Public Works Brian Partington, Water Replenishment District of Southern California William Gedney, GSWC Toby Moore, GSWC Lisa Miller, GSWC