



August 25, 2014

VIA EMAIL to [USTClosuresComments@waterboards.ca.gov](mailto:USTClosuresComments@waterboards.ca.gov)

Mr. Andrew Cooper  
State Water Resources Control Board  
1001 I Street, 16<sup>th</sup> Floor  
Sacramento, CA 95814

### **Comment Letter – California Shipping UST Case Closure Summary**

Golden State Water Company (GSWC) has received the State Water Resources Control Board's (SWRCB) "California Shipping, 8151 Electric Avenue, Stanton- Notice of Opportunity for Public Comment" letter dated June 17, 2014.

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=T0605901225](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901225)), GSWC respectfully offers the following comments:

- GSWC owns and operates five public water-supply wells within a one-mile radius (not including destroyed wells owned by GSWC). Three of these wells are located upgradient and one well is located about 3,900 feet downgradient of the subject UST site, based on June 2012 groundwater elevation contours for the principal aquifers in the basin, which were obtained from the Orange County Water District.
- The uppermost perforations in these wells occur at 294, 915, and 520 feet below ground surface (upgradient wells), 514 feet below ground surface (bgs), and 242 feet bgs (downgradient well), or approximately 222, 843, 443, 458, and 181 feet below mean sea level, respectively.
- Based on data obtained from Orange County Water District, 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 Orange County Water District, a few aquitards appear to exist between the shallow unconfined aquifer and deeper drinking

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water aquifers in the area, which may impede downward migration of contaminants at the site.

- Regular sampling since 1986 suggests that volatile organic compounds (VOCs), including benzene, have not been detected in groundwater produced by GSWC's Orangewood 1 well, which is about 3,900 feet downgradient of the site.
- It is not clear whether all contaminants at the site, such as acetone, tetrachlorethene, and trichloroethene, meet General Criterion b for Low-Threat UST Case Closure Policy sites (i.e., that the site contaminants consist of only petroleum, including petroleum solvents).
- The 5/21/14 UST Case Closure Review Summary Report indicates that petroleum hydrocarbon concentrations are decreasing under natural attenuation, but it is not clear whether natural attenuation has been documented, such as through the measurement of natural attenuation parameters in groundwater.
- While page 8 of 12 of the 5/21/14 UST Case Closure Review Summary Report indicates that benzene plume concentrations in source area well MW-9 are stable, a figure on page 9 of 12 suggests that concentrations of benzene in groundwater from monitoring well MW-9 have been increasing since 2005.
- While the 5/21/14 UST Case Closure Review Summary Report indicates that the petroleum release is limited to shallow soil and groundwater, there are no monitoring wells screened below 36 feet bgs that could be used to preclude the presence of deeper groundwater contamination at the site.
- Because it is not clear whether the areal extent of contamination has been discretely defined, or whether the plume boundary has been unequivocally delineated, any groundwater contaminant plume at the site is subject to significant interpretation; for example, the distance from the tank cavity formerly containing four USTs to downgradient monitoring well MW-7 is approximately 300 feet, which could be interpreted to mean that groundwater contamination is associated with a class 5 site, as opposed to a class 2 site, as indicated in the 5/21/14 UST Case Closure Review Summary Report.

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

Sincerely,

A handwritten signature in blue ink that reads "Robert J. Collar". The signature is written in a cursive style with a large initial "R" and a long, sweeping underline.

Robert J. Collar, PG, CHG  
Senior Hydrogeologist

cc: Bob Trommer, State Water Resources Control Board  
Therese Barakatt, State Water Resources Control Board  
Shyamala Sundaram, Orange County Health Care Agency  
Carl Bernhardt, Santa Ana Regional Water Quality Control Board  
David Bolin, Orange County Water District  
David Chang, GSWC  
Toby Moore, GSWC  
Mark Johnson, GSWC