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Central Valley Regional Water Quality Control Board

15 July 2013

Mr. Jeff Briltz  
Executive Director  
City of Lemoore Redevelopment Agency  
119 Fox Street  
Lemoore, CA 93245

**REVIEW – FIRST QUARTER 2013 GROUNDWATER MONITORING REPORT,  
UNDERGROUND STORAGE TANK SYSTEM RELEASE, BUY-N-SPLIT MARKET,  
500 19 1/2 AVENUE, LEMOORE, KINGS COUNTY, RB CASE 5T16000029**

The *First Quarter 2013 Groundwater Monitoring Report, March 12, 2013* (Report) dated 7 May 2013 and received 17 June 2013, was submitted by the consultant, Associated Soils Analysis, Inc. (Associated). The Report is in response to the Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff letter dated 22 December 2011. This letter summarizes the Report, addresses concerns and provides comments.

**SUMMARY**

The first quarter 2013 groundwater monitoring event was conducted on 12 March 2013. Average groundwater depth was 9.02 feet below the tops of the well casings and flow was toward the southwest with a gradient of less than 0.001 feet per foot. Total petroleum hydrocarbons as gasoline (TPHg) were detected from 80 to 500 micrograms per liter ( $\mu\text{g/L}$ ) in onsite wells but not offsite. Benzene was detected at 1.4 and 43  $\mu\text{g/L}$ , in onsite wells MW2 and MW3, respectively. Methyl tertiary butyl ether (MTBE) was detected at less than 3  $\mu\text{g/L}$  in onsite wells MW3 and MW4, and offsite well MW6. Benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE were not detected in downgradient wells MW7 through MW9. Total petroleum hydrocarbons as diesel (TPHd) was detected at less than 180  $\mu\text{g/L}$  in all but two wells in the monitoring network.

Construction of the soil vapor extraction (SVE) and air sparging (AS) remediation system is nearing completion and startup is expected after 1 July 2013.

Associated recommends that semiannual monitoring continue during the third quarter 2013, that SVE and AS operation begin, and that the repaired MW3 and MW4 wellheads be surveyed.

## COMMENTS

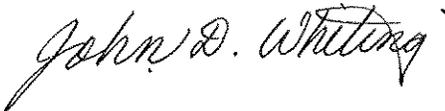
Central Valley Water Board staff concurs that groundwater monitoring should continue during the third quarter 2013 and that the MW3 and MW4 wellheads be surveyed. The contaminant plume appears stable, with decreasing concentrations, but criteria in State Water Resources Control Board (State Water Board) *Low-Threat Underground Storage Tank Case Closure Policy* (Policy) Groundwater Classes 1 through 4 are not met, as a municipal supply well is less than 1,000 feet away. After review of the third quarter 2013 monitoring data, staff may determine, by analysis of site specific conditions, that Class 5 criteria are satisfied.

TPHd has widespread detection in both onsite and offsite wells and in wells without gasoline constituent detections. The downgradient extent is undetermined. Diesel constituents are not expected to migrate further than MTBE and other gasoline constituents, due to limited solubility. These detections may result from field or laboratory equipment contamination or artifacts, or natural organic materials or petroleum biodegradation compounds. The source of diesel constituents should be identified. **During the third quarter 2013, analyze field and laboratory blanks for TPHd and analyze at least four groundwater samples for TPHd both with and without silica gel cleanup preparation.** The results are to be included in the third quarter 2013 monitoring report.

SVE and AS system startup was delayed by transition from Lemoore Redevelopment Agency to Successor Agency, and the requirement to seek Lemoore City Council approval. System installation is nearly complete with startup expected during Fiscal Year 2013-2014. Operation remains warranted, as previous soil sampling documents that the Policy's Direct Contact and Outdoor Air Exposure screening levels were exceeded and the cost of installation has already been expended. Please submit a schedule for system startup, including estimated dates for electrical power connection, and SVE equipment installation and startup.

**By 5 August 2013**, submit the SVE and AS time schedule. **By 1 November 2013**, submit the third quarter 2013 groundwater monitoring report, including the results of TPHd analysis.

Please call me at (559) 445-5504 or email at [jwhiting@waterboards.ca.gov](mailto:jwhiting@waterboards.ca.gov) if you have any questions.



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