To: Ben Heningburg

From: Cheryl Prowell

Date: February 20, 2014

Subject: Objection to Proposed Closure of UST Case 01-0584, Valero #3823, 2991 Hopyard, Pleasanton

Stephen,

The San Francisco Bay Regional Water Quality Control Board has reviewed the proposed closure at this case by the State Board DFA. Based on our review, this case does not meet any of the groundwater-specific criteria since the City of Pleasanton Well #7 is less than 250 feet from the site. Therefore, only criteria 5 could be applied providing it can be demonstrated that Water Quality Objectives will be met before the water is reasonably anticipated to be used. Upon further review, we have concluded that this cannot be demonstrated at this time, and recommend that Alameda County Environmental Health continue to provide regulatory oversight during future corrective actions until such a determination can be made.

With the recent drought declaration and zero percent allocation from the Department of Water Resources' State Water Project, Zone 7 predicts that they will be entirely reliant on groundwater by this summer. As such, Zone 7 has asked the local water purveyors, including the City of Pleasanton, for their plans for new wells and well rehabilitations to help meet the demands. Pleasanton well #7, which is under 250 feet from the site, is one of the wells expected to be evaluated for rehabilitation and could be back on line as soon as this summer. Also, based on our discussion with City of Pleasanton officials, the lack of a straight casing should not be an impediment to the well's rehabilitation.

Site data shows that deep and downgradient monitoring wells (MW-8, MW-12A, MW-14) have recent benzene and/or MtBE concentrations in exceedence of MCLs. These deep wells were installed pursuant to a 1989 Regional Board Order to monitor the plume in the uppermost water-bearing zone of the Pleasanton well #7 screen. In these deep wells, and other key wells onsite and downgradient, the GeoTracker graphs for benzene all show an increasing concentration trend, and the same is true for MtBE in deep well MW-8. This indicates that the plume is not stable or defined. The water levels in onsite and downgradient wells from different zones show a strong downward hydraulic gradient from Zone 1 (the zone of groundwater extraction and a history of MtBE rebound) to Zone 3 (the deep zone), specifically during the current and previous periods of depressed water levels (which are likely due to drought conditions and pumping). Furthermore, pump test data from Zone 7 indicates that there is a strong response in the deep wells to pumping from a municipal well 1,400 feet away, demonstrating a significant hydraulic connection over long distances in Zone 3. Combining these observations, this indicates uncertainty regarding the nature and extent of contamination that is recently finding its way into the deep downgradient wells. Thus, we have a significant concern over the residual mass of petroleum-related contaminants in Zone 1 to Zone 3 (a vertical distance of 80 feet or more) that could be drawn down into Zone 3 and over to the municipal wells (both Pleasanton #7 and possibly further ones).

Therefore, in addition to any directives that ACEH deems necessary, we encourage that the mass in Zones 1 through 3 and its mobility be evaluated to determine the threat it poses, especially with the prospects of pumping at Pleasanton well #7 as early as this summer. In addition to post-remediation monitoring at the site (to assess contaminant rebound), depth-discrete sampling should be performed in Pleasanton well #7 to assess if this well is already impacted. Also, monitoring should continue following the start-up of pumping to determine if wellhead treatment may be necessary to mitigate pollution and keep the well usable. Depending on the results of this evaluation, appropriate remedial actions may be warranted.

cc:

Jerry Wickham and Donna Drogos
Alameda County Department of Enviromental Health
jerry.wickham@acgov.org
donna.drogos@acgov.org

Colleen Winey
Zone 7 Water Agency
cwiney@zone7water.com