To:	Stephen Hill
From:	Cleet Carlton
Date:	February 18, 2014
Subject:	Objection to Proposed Closure of UST Case 01-0584, Valero #3823, 2991 Hopyard, Pleasanton

## Stephen,

I have been asked by you to put together a path to closure for the 2991 Hopyard, Pleasanton UST case, as a request handed down from State Board UST program personnel. This request appears to be the result of reconsideration of case closure by the State Board. To this end I have two general comments.

First, my involvement in this case was only to review and address the draft case closure, noting that it is clear this case does not meet low-threat closure criteria and should not be closed. It is my understanding that Alameda County Environmental Health (ACEH) is still the oversight agency for this case, and in no way do I wish to usurp their authority to direct the responsible party to perform such measures as ACEH deems necessary to protect human health and the environment. Hence, providing a path to closure should be their task, not mine.

That said, I wish to add several observations and suggestions for ACEH in their future considerations of this case. These are based on correspondences with City of Pleasanton and Zone 7 Water Agency personnel, and a review of available data in GeoTracker. Since these considerations are meant for ACEH, I am copying them on this memo.

With the recent drought declaration, the Department of Water Resources predicts that Zone 7 will be entirely reliant on groundwater by this summer. As such, Zone 7 has asked water purveyors, including the City of Pleasanton, for plans for new wells and well rehabilitations. Pleasanton well #7, which is under 250 feet from the site, is one of the wells expected to be evaluated for rehabilitation with the prospects for being back on line as soon as this summer.

Site data shows that deep and downgradient monitoring wells are exhibiting recent concentrations of benzene and/or MtBE in exceedence of MCLs. Note that 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 screen. The GeoTracker GAMA graphs for benzene and MtBE in these deep wells almost all show an increasing concentration trend, indicating that the plume is not stable or defined. The water levels in wells from different zones, both onsite and downgradient of the site, 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 (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 this zone. Combining these observations, there is 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). My understanding is that there is very little known about the nature and extent of contamination that is recently finding its way into the deep downgradient wells.

Therefore, in addition to any directives that ACEH deems necessary, I strongly encourage that this mass and 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 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 a necessity to mitigate pollution and keep the well usable. Note that the Regional Board has the authority under Water Code Section 13304 and our existing cleanup and abatement order to require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment (and I expect the California Department of Public Health will need to be involved with any decisions to allow pumping and/or wellhead treatment). Depending on the results of this evaluation, appropriate remedial actions may be warranted.

## **Cleet** Carlton

S.F. Bay Regional Water Quality Control Board Oakland, CA (510) 622-2374 <u>ccarlton@waterboards.ca.gov</u>

cc:

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