

Nowell, Keith, Env. Health

To: TimBishop@chevron.com
Cc: jim.harms@aecom.com; AFischer@Chevron.com; Roe, Dilan, Env. Health
Subject: Fuel Leak Case RO298 Unocal #4625, 3070 Fruitvale Ave., Oakland

Dear Mr. Bishop,

Thank you, Jim Harms of AECOM, and Alexis Fischer of Chevron Environmental Management Company (Chevron) for participating in the meeting on January 30, 2014 regarding fuel leak case for Unocal #4625, 3070 Fruitvale Avenue, Oakland, Alameda County Environmental Health (ACEH) case number RO0000298. The purpose of the meeting was to discuss the status of the case and identify action items to move the case forward toward closure. ACEH acknowledged the case may be a candidate for closure in the near future under the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP) provided concerns regarding the instability of total petroleum hydrocarbons as gasoline (TPHg) and methyl tertiary butyl ether (MTBE) concentrations in one well (MW-5), apparent inconsistencies of TPHg and MTBE groundwater concentrations observed in on-site and down gradient sampling locations, and the vertical delineation of contaminant plume are addressed.

Therefore at this juncture, please address the following technical comments and submit the requested document by the date specified below:

Technical Comments

- **Concentration Instability** – The concentrations of TPHg and MTBE in groundwater in MW-5, located at the down gradient edge of the site, appear to increase with increasing depth to water. Please provide an explanation of the relationship of fluctuating concentrations with depth to water for TPHg and MTBE and whether residual source may be present.
- **Concentration Inconsistency** – Based on the apparent inconsistency in contaminant concentrations, it is unclear to ACEH that the contaminant plume has been delineated. The groundwater flow direction at the site appears relatively stable. However, apparent inconsistencies of TPHg and MTBE concentrations observed in groundwater in MW-5 and the cone penetrometer test location CPT-2 exist when compared with the down gradient CPT-7, CPT-8 and monitoring well MW-8. Please evaluate the plume length using the LTCP Groundwater Justification paper based on concentrations reported in MW-5 and CPT-2. Please discuss if a preferential pathway may exist altering the direction of the contaminant plume.
- **Vertical Delineation** – The vertical delineation of contaminant plume appears undefined. The depth discrete groundwater sample from CPT-1, recovered from an interval of 41 to 46 feet below the ground surface (bgs), was reported to contain concentrations of TPHg (1,800 micrograms per liter ($\mu\text{g/L}$)), benzene (52 $\mu\text{g/L}$), toluene (170 $\mu\text{g/L}$), ethylbenzene (64 $\mu\text{g/L}$), and xylenes (320 $\mu\text{g/L}$) (BTEX), and MTBE (25 $\mu\text{g/L}$). Grab groundwater sample CPT-1 (41-46) is the deepest water sample collected at the site.

As discussed in the meeting please prepare a focused site conceptual model to address the technical comments above for discussion for the next meeting to discuss the status of the case and identify action items to move the case forward toward closure.

Technical Report Request

Please provide a draft technical report to ACEH (Attention: Keith Nowell), for consideration prior to the next meeting, following specified schedule:

- **February 28, 2014 – Focused Site Conceptual Model (draft)** (file name: RO0000298_SCM_R_yyyy-mm-dd)

Thank you for your cooperation. ACEH looks forward to working with you and your consultant to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Respectfully,

Keith Nowell

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<http://www.acgov.org/aceh/top/ust.htm>