

Nowell, Keith, Env. Health

From: Nowell, Keith, Env. Health
Sent: Friday, May 30, 2014 12:50 PM
To: 'JillianHolloway@chevron.com'
Cc: 'jim.harms@aecom.com'; Roe, Dilan, Env. Health
Subject: RO352 - Lake Chabot Unocal, 18950 Lake Chabot Rd, Castro Valley

Dear Ms. Holloway,

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the recently submitted documents *Site Conceptual Model* and *Case Closure Summary*, both dated February 20, 2014 and prepared by AECOM for the subject site. ACEH acknowledges 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 identified in the Technical Comments below are addressed. However, based on our review of the data in the case file, it is ACEH's opinion that the case does not meet the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP) General Criteria e (Site Conceptual Model); the Media Specific Groundwater criteria for plume length, distance to the nearest surface water body from the plume boundary and distance to the nearest supply well from the plume boundary; Media Specific Vapor Intrusion to Indoor Air; and the Media Specific Direct Contact and Outdoor Air Exposure.

Therefore at this juncture, ACEH requests that you evaluate the site data against the LTCP Media Specific criteria.

Technical Comments

1. General Criteria e- It is ACEH's opinion that the site does not meet the LTCP General Criteria e. General Criteria e has not been satisfied until a site is considered closable by ACEH.
2. Media Specific Groundwater criteria - Groundwater monitoring well MW-7, located near the southern property boundary, demonstrates the highest contaminant concentrations reported for the existing monitoring well network. Historic analytical data for well MW-7 indicate persistent fluctuations of total petroleum hydrocarbons as gasoline (TPHg) concentrations range from 450 micrograms per liter ($\mu\text{g/L}$) to 2,800 $\mu\text{g/L}$, most recently reported at 1,900 $\mu\text{g/L}$. These concentrations indicate residual source material may reside beneath the station building. Plotting groundwater flow, which has been consistently been to the southwest, through well MW-7 suggests the plume is passing between well MW-5 and previously abandoned well MW-4. ACEH is of the opinion that the contaminant plume has not been defined, there by the Media Specific Groundwater criteria for plume length, distance to the nearest surface water body from the plume boundary and distance to the nearest supply well from the plume boundary are not met.

Therefore, please review the well search data from both the California Department of Water Resources (DWR) and the Alameda County Public Works Agency (ACPWA) well databases, having a well search radius of at least 2,000 feet. Include in the report requested below a table and a figure presenting the DWR and ACPWA well search and other sensitive receptor data. The table should include the well identification, location, type and depth of the well, and distance from the well to the site. Please prepare a figure using an aerial photographic base showing the maximum distance of the projected plume boundary, using the SWRCBs LTCP *Technical Justification for Groundwater Plume Length, Indicator Constituents, Concentrations, Buffer Distances (Separation Distances) to Receptors* (LTCP Guidance; SWRCB 2012), as a circle whose center is at the location of the station building and a second circle projecting the 1,000-foot buffer from the potential leading edge of the contaminant plume to the receptors (e.g. wells and nearest surface water bodies). Receptors within the 2,000-foot radius of the station building location should be depicted on the figure.

3. Media Specific Vapor Intrusion to Indoor Air- The site is situated in a residential neighborhood. Based on the reported depth to groundwater beneath the site, as shallow as 2.99 feet below the ground surface (bgs). ACEH is of the opinion that the site does meet the bioattenuation zone criteria. It is unclear to ACEH that the waste oil underground storage tank, in the vicinity of MW-7, has been analyzed for the appropriate analysis suite and that MW-7 has most recently been reported to contain 41 $\mu\text{g/L}$ naphthalene, with recent concentrations varying up to

150 µg/L. The San Francisco Bay Region Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESL) concentration for naphthalene presented in Table E-1 (Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion) is 160 µg/L. Based on our review, it is unclear to ACEH that the Media Specific Vapor Intrusion to Indoor Air criteria has been met.

Therefore, please review existing soil and groundwater data to evaluate vapor intrusion risk to the residential neighborhood. Review existing site data to identify the source of the naphthalene at the site and evaluate the risk of naphthalene vapor intrusion to nearby residences. Please include details of down gradient foundations.

4. Media Specific Direct Contact and Outdoor Air Exposure- It is unclear to ACEH that the waste oil underground storage tank has been analyzed for the appropriate analyses suit as limited sampling for chemicals listed in Table 1 of the LTCP at the appropriate depths has been performed.

Therefore, please review existing soil data to evaluate the Media Specific Direct Contact and Outdoor Air Exposure criteria. Include in the report requested below a table summarizing the concentrations in the 0 to 5-foot bgs and 5 to 10-foot bgs zones for chemicals listed in Table 1 of the LTCP.

Technical Report Request

Please upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **July 28, 2014– Focused Site Conceptual Model and Data Gap Identification Work Plan** (file name: RO0000352_WP_R_YYYY-MM-DD)

Thank you for your cooperation. ACEH looks forward to working with you and your consultants 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.

Regards,
Keith Nowell

From Keith Nowell PG, CHG
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540
phone: 510 / 567 - 6764
fax: 510 / 337 - 9335
email: keith.nowell@acgov.org

PDF copies of case files can be reviewed/downloaded at:

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