



ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
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July 9, 2013

Mr. Ralph Fattore
Classic Investments, LLC
4145 Broadway
Oakland, CA 94611

Norman Alberts
Patterson Ranch Inc.
321 Hartz Avenue, Suite 200
Danville, CA 94549-6217

Subject: Additional Information Request for Fuel Leak Case No. RO0000509 and Geotracker Global ID T0600102227, Downtown Toyota, 4145 Broadway, Oakland, CA 94611

Dear Messrs. Fattore and Alberts:

Alameda County Environmental Health (ACEH) has reviewed the recently submitted documents entitled, *Site Conceptual Model* dated May 4, 2011 and the *Low Threat Closure Policy Review Data Gap Identification Tool* submitted on April 30, 2013, which were prepared by RGA Environmental, Inc. for the subject site.

ACEH has evaluated the data and recommendations presented in the above-mentioned report, in conjunction with the case files, and the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). Based on our review, we have determined that insufficient data has been presented for ACEH to make a final determination on whether the site meets the LTCP General Criteria d (Free Product), the Media-Specific Criteria for Groundwater, and the Media-Specific Criteria for Direct Contact and Outdoor Air.

Therefore ACEH would like to schedule a meeting at our office in Alameda with you and your consultant to provide a format for you to present additional details/clarification on the items discussed in the technical comments below, prior to making a final determination on whether the site qualifies for closure under the LTCP. Please call us by **July 30, 2013** with proposed dates and times for the meeting.

TECHNICAL COMMENTS

- 1. LTCP General Criteria d (Free Product)** – The LTCP requires free product to be removed to the extent practicable at release sites where investigations indicate the presence of free product by removing in a manner that minimizes the spread of the unauthorized release into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges, or disposes of recovery byproducts in compliance with

applicable laws. Additionally, the LTCP requires that abatement of free product migration be used as a minimum objective for the design of any free product removal system.

ACEH's review of the case files indicates that insufficient data and analysis has been presented to assess free product at the site. Specifically, a review of historical soil and groundwater analytical data provides indirect evidence of free product as described in the SWRCB's *Technical Justification for Vapor Intrusion Media-Specific Criteria (Final 03-21-2012)*. Total recoverable petroleum hydrocarbons (TRPH) has been detected in groundwater samples at concentrations above the SWRCB's free product indicator "rules of thumb" of greater than 5,000 micrograms per liter ($\mu\text{g/L}$) in samples collected from boring PS08.

During the last investigation performed at the site in 2008, one boring (B7) was advanced by RGA in an attempt to investigate the area in the vicinity of PS08. However, the boring was not located in the approved location and the groundwater sample was collected from 25 to 29 feet below ground surface (bgs). This depth is deeper than all other documented samples collected from 8.7 to 15 feet bgs. Additionally, no boring logs have been provided for borings PS05 through PS12. However, boring B-2, advanced in 1999 to a depth of 9.5 feet bgs and located near boring PS08, also had high TPH concentrations in grab groundwater samples. Therefore, it may be surmised that boring PS08 was advanced to a similar depth as B-2 and PS01 through PS03 which were advanced during the same investigation (approximately 13 to 15 feet bgs). Therefore, a confirmation sample is still needed in this area or additional justification needs to be provided to support that the potential source area in the vicinity of PS08 has been adequately delineated.

2. **LTCP Media Specific Criteria for Groundwater** – To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites listed in the policy.

Our review of the case files indicates that insufficient data and analysis has been presented to support the requisite characteristics of plume stability or plume classification for the following reasons

- The lateral extent of the plume and free product has not been defined. As stated previously, groundwater was not collected from the same depth as PS-08 and B2 leaving this interval uninvestigated.
- Utilities exist in the area that have not been investigated. The utility location map did not show the locations of the on-site laterals that connect to the utilities. There was a carwash/detailing building on-site with a drain located within the building and there are two other buildings noted (a service building and a sales building). None of the on-site utility lines are shown on the utility map yet RGA Environmental states that boring B7 was moved due to a sewer line. Please complete the utility survey map for the site and generate cross-sections to include the locations of on-site utilities, soil information, and analytical data. Please prepare cross-sections for the site both parallel and perpendicular to groundwater flow direction and bring to the meeting for discussion.
- The potential for migration of free product through previous stream channels has been suggested by RGA in the SCM: RGA stated that "A slug contaminant transport model in conjunction with preferential movement within natural conduits of more permeable materials provides an explanation for the elevated groundwater hydrocarbon concentrations in the vicinity of B2 and PS08 that is

consistent with the former used oil UST as the source.” Yet no cross-sections were provided to demonstrate this inferred natural conduit and due to the lack of boring data, enough information may not be available to prepare proper cross-sections to evaluate the potential for migration along a stream channel. Please prepare the cross-sections requested above to also discuss if the lack of lithology information remains as a significant data gap.

- 3. LTCP Media Specific Criteria for Direct Contact and Outdoor Air Criteria** – The LTCP describes conditions where direct contact with contaminated soil or inhalation of contaminants volatilized to outdoor air poses a low threat to human health. According to the policy, release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if the maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 for the specified depth bgs. Alternatively, the policy allows for a site specific risk assessment that demonstrates that maximum concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health, or controlling exposure through the use of mitigation measures, or institutional or engineering controls.

Our review of the case files indicates that analysis for naphthalene and polycyclic aromatic hydrocarbons (PAHs) have not been performed on site soils although the UST contained waste-oil. Additionally, no benzene or ethylbenzene analysis was performed from 5 to 10 feet bgs in source area borings PS01 through PS03, even though this interval is below the tank invert depth. Please present a strategy for collecting this data or alternatively a rationale for why the data is not necessary to close the site under the LTCP.

ACEH looks forward to discussing these items at the meeting. Please contact us by the due date above with proposed dates and times to meet. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,

Barbara J. Jakub, P.G.
Hazardous Materials Specialist

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