

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 20, 2008

Mr. Ian Robb
6001 Bollinger Canyon Road K2256 B
PO Box 6012
San Ramon, CA 94583-2324

Mr. Onsori Ardavan Mr. Ahmad Mostofi
9310 Union City Blvd. 37 Victoria Drive
Union City, CA 94587 Atherton, CA 94027-4122

Subject: Fuel Leak Case No. RO0000185 (Global ID #T0600102298), Chevron #9-7127, I 580 and Grant Line Road, Tracy, CA

Dear Mr. Robb:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site and the documents entitled "Additional Assessment and Revised Interim Remedial Action Plan (IRAP)" dated October 19, 2007, and prepared by Conestoga Rovers Associates (CRA). Due to the presence of residual separate phase petroleum hydrocarbon contamination in soil and groundwater beneath the site, CRA and Chevron have recommended remediation using surfactant injection into an existing monitoring well. In addition, several remediation options have been implemented at the site, thus far these remedial options have had limited success.

Furthermore, in previous correspondence from ACEH dated April 2007, we expressed several concerns regarding the use of surfactant, including the Central Valley Water Quality Control Board's requirement for Chevron to perform a bench scale treatability study prior to approval. ACEH does not concur with the proposed use of surfactant injection as interim remediation prior to the completion of a treatability study.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to <mailto:steven.plunkett@acgov.org>) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Source Area Evaluation.** Recent monitoring data indicate that approximately 1.7 feet of free product remains in monitoring well MW-1, which is located in the source area. In addition, benzene concentrations of 9,200 parts per billion (ppb) were detected in groundwater from MW-3 located near the former dispenser island. It appears that a residual source of contamination is continuing to add mass to the hydrocarbon plume beneath the site. Furthermore, your consultants evaluation of analytical data have not determined the quantity of residual mass of petroleum hydrocarbon that remains in the source area. Therefore, we request that you quantify the residual mass of contamination remaining in the source area and present your conclusions and recommendations in the Draft CAP (revised) report requested below.
2. **Bench Scale Treatability Study.** ACEH is concerned that Chevron has not considered the potential negative implications of surfactant injection in an active drinking water basin. Therefore, you are required to perform a bench scale treatability study to evaluate the use of surfactant as a remedial alternative. Please present the results from the treatability study in the report requested below.

3. **Site Geology and Hydrogeology.** No evaluation of site lithology has been conducted to determine applicability of surfactant injection. Furthermore, fluid flow through a fractured media beneath the site could act as a preferential pathway for the distribution of hydrocarbon contaminated surfactant. It is unlikely that your proposed hydraulic controls using vacuum extraction from MW-1 and MW-9 will be successful in removing all surfactant or remobilized, sorbed phase petroleum hydrocarbon product. In addition, vacuum extraction could result with additional contamination distribution throughout the well screen. Our review of the case studies you provided indicate that surfactant was allowed to equilibrate for at least 72 hours prior to removal. It is unclear how CRA determined that a 1 hour equilibration of surfactant will result in the solubilization of residual sorbed phase contamination. Additionally, case studies are not a viable substitute for a bench scale treatability study that includes site specific information regarding lithology, hydrogeology, and contamination fate and transport, etc.
4. **Corrective Action Plan.** CRA asserts that the remediation using surfactant and batch extraction will accelerate remediation of soil and groundwater, leading to expedited site closure. Interim remedial measures are intended to control plume migration and mitigate residual separate phase contamination, interim remediation is not intended as the final remedial action at this site. ACEH does not agree with the use of surfactant as a remedial option for the mitigation of hydrocarbon contamination. Interim remediation must be completed within the corrective action process.

The CAP should include contamination cleanup levels and cleanup goals for all COCs and for the appropriate groundwater designation. Soil cleanup levels should ultimately (within a reasonable timeframe) achieve water quality objectives (cleanup goals) for groundwater in accordance with San Francisco Regional Water Quality Control Board Basin Plan. Please propose appropriate cleanup levels and cleanup goals in accordance with 23 CCR Section 2725, 2726, and 2727 in the FS/CAP. Please include your anticipated time frame for meeting the cleanup levels and goal.

Public participation is a requirement for the Corrective Action Plan (CAP) process. Therefore, upon approval of a CAP, but before implementation, ACEH will notify potentially affected members of the public and concerned citizens who live or own property in the surrounding area of the proposed remediation described in the CAP. Public comments on the proposed remediation will be accepted for a 30-day period. We request that you perform the proposed work and send us the reports described below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Steven Plunkett), according to the following schedule:

- **October 30, 2008** – Corrective Action Plan (Revised)
- **November 30, 2008** – Surfactant Bench Scale Treatability Study

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

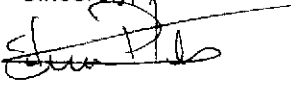
AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

If you have any questions, please call me at (510) 383-1761 or send me an electronic mail message at steven.plunkett@acgov.org.

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Sincerely,



Steven Plunkett
Hazardous Materials Specialist

cc: Mark Miller
CRA
2000 Opportunity Drive, Suite 110
Roseville, CA 95678



Donna Drogos, PE
Supervising Hazardous Materials Specialist

Donna Drogos, ACEH Steven Plunkett ACEH, File