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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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August 22, 2007

Mr. Satya Sinha
Chevron Environmental Management Company
6001 Bollinger Canyon Rd., K2256
San Ramon, CA 94583-2324

Ms. Chris Davidson
City of Livermore Economic Development
1052 S. Livermore Ave.
Livermore, CA 94550

Subject: Fuel Leak Case No. RO0002908 and Geotracker Global ID T0600196622, Miller Square Park, 2259 First Street, Livermore, CA 94550

Dear Mr. Sinha and Ms. Davidson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above referenced site including the recently submitted documents entitled, "Underground Storage Tank Removal and Compliance Sampling Report," dated August 17, 2007 and "Site Investigation Workplan," dated July 20, 2007. Both documents were prepared on behalf of Chevron by Conestoga-Rovers & Associates. The "Underground Storage Tank Removal and Compliance Sampling Report," presents the results from removal of two USTs from the southern portion of Mills Square Park on June 20, 2007. Elevated concentrations of Total Petroleum Hydrocarbons (TPH) as diesel, total oil & grease (TOG), and lead were detected in three soil samples collected beneath the northern UST.

The Site Investigation Work Plan proposes a scope of work to investigate the extent of fuel hydrocarbons in soil, soil vapor, and groundwater. We request that you revise the Site Investigation Work Plan in accordance with the technical comments below and **submit a revised Work Plan by October 3, 2007**.

TECHNICAL COMMENTS

1. **Soil Sampling.** The Work Plan indicates that, "Soil samples will be collected every 10 feet starting from 5 fbg to total depth, and additionally at areas of obvious hydrocarbon impact, lithologic change, and in the capillary fringe zone." It is not clear whether the proposed soil sampling applies to each of the three types of proposed borings: CPT borings, direct push borings, and soil vapor probe borings. In order to make the field program more efficient, we recommend that you minimize the number of soil samples to be collected in the CPT borings and use direct push borings in areas where more soil sampling is required. Please see the discussion of soil sampling for each type of boring in the technical comments below.

2. **Metals in Shallow Soil.** During the September 2003 investigation by Fugro West, Inc., lead was detected at a concentration of 3,600 milligrams per kilogram in a soil sample collected at a depth of 3 feet bgs. The January 6, 2004 report by Fugro West, Inc. speculated that the source of lead in soil was fill material in Mills Square Park. During the 2006 site investigation by Cambria, no soil samples were collected for metals analysis at a depth shallower than 5 feet bgs. In the revised Work Plan requested below, please include plans to define the extent of elevated concentrations of lead in shallow soil at the site. Recommended sampling locations are shown on the attached figure entitled, "Recommended Sampling Locations." We request that soil samples be collected at depths of 1.5, 3.0, 5.0, and 10.0 feet bgs at each sampling location and analyzed for total lead by EPA Method 6010B. If staining, odor, or elevated PID readings are observed in any of the soil samples, we request that the soil samples also be analyzed for TPH as diesel and TPH as motor oil by EPA Method 8015M *and TPH as gasoline, benzene, toluene,* ethylbenzene, and xylenes (BTEX), fuel oxygenates, 1,2-dichloroethane, and 1,2-dibromomethane by EPA Method 8260B.

3. **Vertical Extent of Contamination and CPT Borings.** The proposed locations of the CPT borings are acceptable. However, the CPT borings are also required to define the vertical extent of contamination. Therefore, we request that the CPT borings be extended to a depth of 80 feet bgs. Groundwater samples are to be collected from first encountered groundwater and each significant water-bearing zone identified on the CPT log below first encountered groundwater. Please include these plans in the Revised Work Plan requested below.

4. **Soil Vapor Sampling.** The proposed method for installation of a nested probe and collection of soil vapor samples is acceptable. We request that one additional soil vapor probe be installed in the area of the former dispenser islands to evaluate whether elevated concentrations of fuel hydrocarbons in soil have resulted in elevated concentrations of benzene in soil vapor. In the Revised Work Plan requested below, please include the additional soil vapor sampling location shown on the attached figure entitled, "Recommended Sampling Locations."

5. **Direct Push Borings.** The proposed boring locations for direct push borings SB-6 and SB-7 are acceptable. However, we request that two additional direct push borings be advanced at the locations shown on the attached figure entitled, "Recommended Sampling Locations." The soil borings are to be advanced approximately 10 feet below first encountered groundwater in order to collect a grab groundwater sample from each boring; however, we request that the depth of the boring be extended if contamination is observed at the total depth of the boring. The soil borings are to be visually logged continuously in the field for soil type, color, moisture content, odor, and other observed features and screened with a photoionization detector. Soil samples are to be collected for laboratory analysis at any interval where visible staining, odor, or elevated PID readings are observed. If visible staining, odor, or elevated PID readings are observed, a sufficient number of soil samples must be collected to characterize the vertical interval over which the contamination occurs. If no visible soil staining, odor, or elevated PID readings are observed in the soil boring, we request that soil samples be collected for laboratory analyses at a maximum of 10- foot intervals from 5 feet bgs to the total depth of the boring. Please present plans for the direct push borings in the Revised Work Plan requested below.

6. **Soil and Groundwater Analyses.** As discussed in technical comment 2, we request that soil samples be collected from shallow borings to define the extent of metals in shallow soil be analyzed for total lead by EPA Method 6010B. We request that soil samples collected from the direct push borings be analyzed for TPH as diesel and TPH as motor oil by EPA Method 8015M and TPH as gasoline, benzene, toluene, ethylbenzene, and xylenes (BTEX), fuel oxygenates, 1,2-dichloroethane, and 1,2-dibromomethane by EPA Method 8260B, and total lead by EPA Method 6010B. We request that all groundwater samples be analyzed for TPH as diesel by EPA Method 8015M and TPH as gasoline, benzene, toluene, ethylbenzene, and xylenes (BTEX), fuel oxygenates, 1,2-dichloroethane, and 1,2-dibromomethane by EPA Method 8260B.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **October 3, 2007** – Revised Work Plan

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

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will 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 (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

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. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for 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 monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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) 567-6791.

Sincerely,

Jerry Wickham

Jerry Wickham, P.G.
Hazardous Materials Specialist

Attachment: Recommended Sampling Locations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Colleen Winey, QIC 80201
Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551

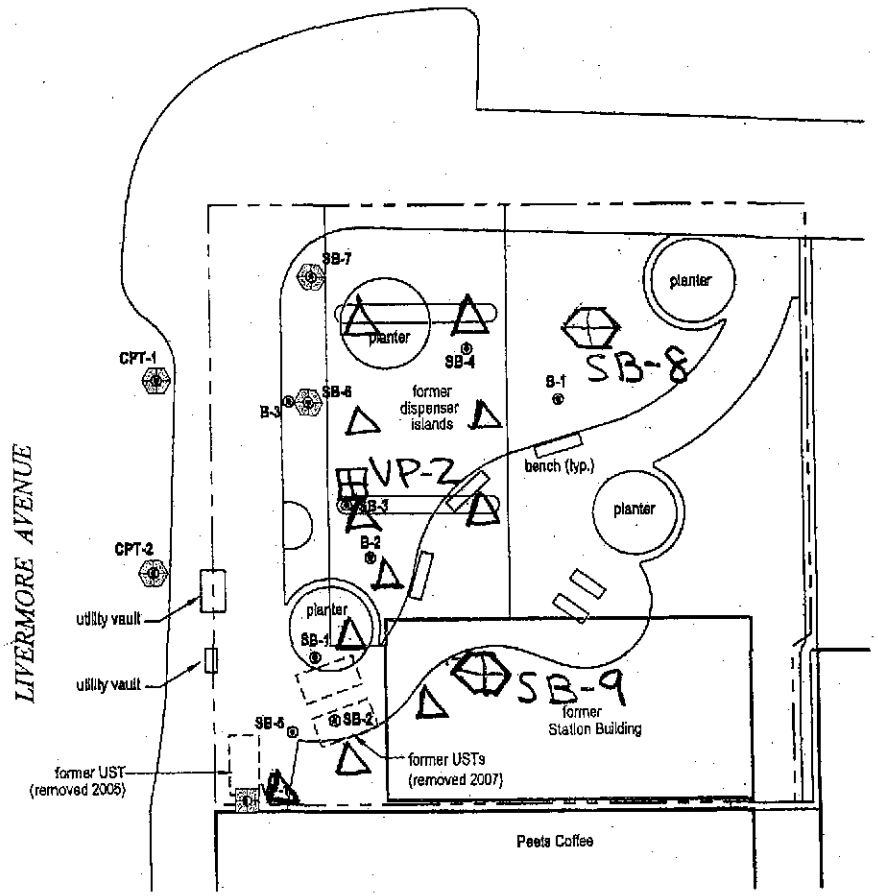
Danielle Stefani
Livermore-Pleasanton Fire Department
3560 Nevada Street
Pleasanton, CA 94566

John Rigter
Livermore-Pleasanton Fire Department
3560 Nevada Street
Pleasanton, CA 94566

Charlotte Evans
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Recommended Sampling Locations



EXPLANATION

- SB-1 Soil boring location
- B-1 Soil boring location (Fugro 2003)
- SB-6 Proposed soil boring location
- CPT-1 Proposed CPT location
- VP-1 Proposed vapor probe location

△ Shallow Soil Sampling Location for Lead

0 10 20 40

Scale (ft)

Basemap modified from Aerial photographs

FIGURE

2

Site Plan with Proposed Boring Locations

CONESTOGA-ROVERS & ASSOCIATES

Former Chevron Station 30-7233

2259 First Street

Livermore, California