

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
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(510) 567-6700  
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April 25, 2008

Mr. Mohammad Pazdel  
1770 Pistacia Court  
Fairfield, CA 94533

Mr. Hamid Khatirine  
c/o Mr. Michael D. Liberty  
3713 Century Drive  
Campbell, CA 95008-3832

Subject: Fuel Leak Case No. RO0000473 and Geotracker Global ID T0600191157, ARCO,  
15101 Freedom Avenue, San Leandro, CA 94578

Dear Mr. Pazdel and Mr. Khatirine:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the recently submitted document entitled, "Additional Soil and Groundwater Investigation for Remedial Investigation and Feasibility Study," dated March 14, 2008, which was prepared by SOMA Environmental Engineering, Inc. for the subject site. The report details the installation of groundwater monitoring wells within the second water bearing zone, soil vapor study, multi-phase extraction pilot study, and an evaluation of available groundwater remedial technologies.

At this time, an adequate reievw of the above-mentioned report cannot be conducted since the remedial alternatives evaluation does not appear to have been conducted in accordance Title 23, California Code of Regulations, Section 2725. ACEH requests that you address the following technical comments, and send us the technical reports described below.

**TECHNICAL COMMENTS**

1. **Soil Vapor Study** – In Section 2.3 of the above-mentioned report, SOMA details the collection of four soil vapor samples to access the contaminant volatilization to indoor air exposure pathway at the site. In Section 2.3.1, SOMA describes the methodology of soil vapor collection utilized at the site, which states "[a] leak detector compound (isopropyl alcohol 70 %) was placed around the borehole, top of the probe rod, and at the vapor tight valve." However, isopropyl alcohol was not part of the analytical suite. Additionally, atmospheric gases (i.e. oxygen, carbon dioxide, and methane) were also not part of the analytical suite. Therefore, it is difficult to determine whether the concentrations detected in soil gas are representative of actual subsurface conditions or if the results have been diluted or affected by atmospheric breakthrough (leaks in the sampling train). Since it appears that the sample results may not be representative of actual subsurface conditions and hence cannot be considered reliable, please re-collect the soil vapor samples. It is recommended

that soil vapor wells or probes are constructed with the sampling device and all fittings placed under a shroud with pliable weather-stripping along its base to maintain a tracer gas atmosphere. The shroud should ensure that there is tracer gas around all sampling connections. The shroud should have a port for inserting a monitoring and sampling device (e.g. Photo Ionization Detector) to ensure that tracer gas atmosphere is maintained. Please propose a scope of work to address the above-mentioned concerns in the Feasibility Study (FS) by the due date specified below.

2. **Feasibility Study** – In Section 4.3 of the above-mentioned report, SOMA evaluated groundwater extraction and treatment, soil vapor extraction/air sparging (SVE/AS), multi-phase extraction (MPE), natural attenuation, chemical oxidation, and excavation remedial alternatives, and selected groundwater extraction and treatment and multi-phase extraction as the most cost-effective remedial alternative. However, according to SOMA, SVE/AS, natural attenuation, chemical oxidation, and excavation remedial alternatives would not be feasible due to various reasons other than higher costs. The intent of the FS is to evaluate at least three remedial alternatives (other than the “no action” and “monitored natural attenuation” remedial alternatives) having likelihood of attaining site cleanup objects. Please prepare and submit an FS by the due date specified below that addresses the above-mentioned concerns.
3. **Multi-Phase Extraction Pilot Test** – SOMA describes measuring the vacuum influence within the unsaturated zone at various wells to determine the zone of influence during the multi-phase extraction (MPE) pilot test in Section 2.4 of the above-mentioned report. However, SOMA does not discuss drawdown and upwelling in the extraction wells, an important indication of the influence of MPE on the saturated zone. Drawdown measurements, along with liquid flow, applied vacuum, and elevation head at the pump inlet measurements, can be used with an appropriate analytical solution to estimate transmissivity of that portion of the formation that is intersected by the well screen. Please address the above-mentioned concerns in the FS by the due date specified below.
4. **Pump and Treat with Multi-Phase Extraction** – It appears that the proposed pump and treat system with MPE focuses on controlling further migration of the dissolved-phase contaminant plume and remediating petroleum hydrocarbon impacted soils in the “smear zone.” However, based on soil sample analytical results collected following the UST removals, including soil over-excavation confirmation samples, a potential secondary source of groundwater contamination appears to exist onsite. It is not clear whether the proposed remedial alternative will address the potential secondary source at the site. It also not clear how the proposed remedial alternative will remediate elevated concentrations of contaminants detected in groundwater at boring TWB-1 and off-site monitoring well MW-6. Please provide clarification and include a detailed discussion in the FS due by the date specified below.
5. **Area Well Survey** – Two active backyard irrigation water wells were identified in the area well survey that could potentially be affected by the off-site dissolved petroleum hydrocarbon plume emanating from the subject site. A groundwater sample collected from a backyard irrigation well located at 1573 153<sup>rd</sup> Street detected 21 µg/L TBA. Based on the analytical results, it is imperative (i.e. protective of human health and the environment) that a groundwater sample is obtained from the other irrigation well located at 1575 153<sup>rd</sup> Street.

Please re-attempt groundwater sampling from this well and report your findings in the FS/CAP due by the date specified below.

#### **TECHNICAL REPORT REQUEST**

Please submit the FS/CAP and technical reports to Alameda County Environmental Health (Attention: Paresh Khatri), according to the following schedule:

- **June 24, 2008** – FS (To include Soil Vapor Sampling)
- **July 30, 2008** - Quarterly Monitoring Report (2<sup>nd</sup> Quarter 2008)
- **October 30, 2008** - Quarterly Monitoring Report (3<sup>rd</sup> Quarter 2008)
- **January 30, 2009** - Quarterly Monitoring Report (4<sup>th</sup> Quarter 2008)
- **April 30, 2008** - Quarterly Monitoring Report (1<sup>st</sup> Quarter 2009)

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](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**

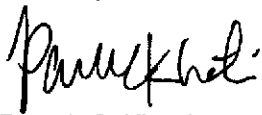
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

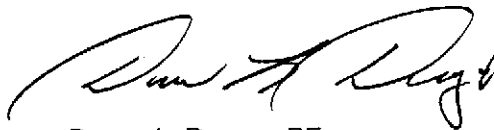
If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 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) 777-2478 or send me an electronic mail message at [pares.h.khatri@acgov.org](mailto:pares.h.khatri@acgov.org).

Sincerely,



Paresh C. Khatri  
Hazardous Materials Specialist



Donna L. Drogos, PE  
Supervising Hazardous Material Specialist

Mr. Pazdel and Mr. Khatirine  
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Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mansour Sepehr, SOMA Environmental Engineering, 6620 Owens Drive, Suite A,  
Pleasanton, CA 94588  
Sunil Ramdass, SWRCB, Division of Clean Water Programs, Underground Storage Tank  
Program, 1001 I Street, 17<sup>th</sup> Floor, P.O. Box 944212, Sacramento, CA 94244  
David Charter, SWRCB, Division of Clean Water Programs, Underground Storage Tank  
Program, 1001 I Street, 17<sup>th</sup> Floor, P.O. Box 944212, Sacramento, CA 94244  
Donna Drogos, ACEH  
Paresh Khatri, ACEH  
File

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b>	<b>ISSUE DATE:</b> July 5, 2005
	<b>REVISION DATE:</b> December 16, 2005
	<b>PREVIOUS REVISIONS:</b> October 31, 2005
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, 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.

#### REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:  
RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

#### Submission Instructions

##### 1) Obtain User Name and Password:

- a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
  - i) Send an e-mail to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org)  
or
  - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
- b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**

##### 2) Upload Files to the ftp Site

- a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
  - (i) Note: Netscape and Firefox browsers will not open the FTP site.
- b) Click on File, then on Login As.
- c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
- d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
- e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

##### 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs

- a) Send email to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org) notify us that you have placed a report on our ftp site.
- b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
- c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)