



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

January 20, 2016

Mark A. Jacobson & Ilona J. Frieden
811 Paramount Road
Oakland, CA 94610
(Sent via E-mail to: mjacobson@php.ucsf.edu)

James E. Allison & Margaret Linderstein
214 Highland Avenue
Piedmont, CA 94611
(Sent via E-mail to: jallison@medsfgh.ucsf.edu)
(Sent via E-mail to: mlinderstein@gmail.com)

Subject: Request for Data Gap Work Plan and Focused Site Conceptual Model for Fuel Leak Case No. RO0003143 (GeoTracker Global ID T10000006106), Paramount UST, 811 Paramount Road, Oakland, CA 94610

Dear Responsible Parties:

Alameda County Environmental Health (ACEH) staff has reviewed the case files including the *Data Gap Investigation to Evaluate Potential Indoor Air Vapor Intrusion by Soil-Gas Related to a Former Residential Underground Heating Oil Tank*, dated November 20, 2015. The report was submitted on your behalf by Stellar Environmental Solutions, Inc. (Stellar). Thank you for submitting the report.

The referenced report documents the collection of an additional soil vapor sample from soil gas well SG5.5, and as a result of the elevated soil vapor concentrations generated, the collection of a crawl space vapor sample as a proxy for indoor air, in general conformance with Department of Toxic Substances Control (DTSC) guidance documents. While the site had previously appeared to meet the State Water Resource Control Board (SWRCB) Low Threat Closure Policy (LTCP), the additional work was requested by ACEH due to the previous unusual elevated detection of Total Petroleum Hydrocarbons as gasoline (TPHg) and elevated benzene detection limits in soil vapor at a former heating oil underground storage tank (UST) location in proximity to a residential home. Vapor concentrations of TPHg and benzene in vapor well SG5.5 have increased (TPHg rising from 880,000 to 2,000,000 $\mu\text{g}/\text{m}^3$, and benzene rising from <250 to 600 $\mu\text{g}/\text{m}^3$) since the previous sampling event and the data appears to suggest that the UST may have stored gasoline at some point in the past. Oxygen is reported to be consistently present at less than 4 percent (%; 3.0 to 3.4% in three samples). Conversely, there may have been a spill of an undetermined volume of gasoline in proximity to the residential home that has complicated evaluation of the former heating oil UST.

Additionally, 1,1,2-Trichloroethane (1,1,2-TCA) was detected in the soil vapor sample at an elevated concentration of 4,300 $\mu\text{g}/\text{m}^3$, which is several orders of magnitude above the residential San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) of 76 $\mu\text{g}/\text{m}^3$. While this chemical cannot be managed under the LTCP, its presence is of concern due to the elevated concentration.

Conversely, based on a one-time sampling event, the crawl space vapor sampling suggests that vapor intrusion to the residence may not be a concern; however, DTSC guidelines indicate that due to temporal and seasonal variations, multiple sampling efforts are appropriate.

Utilizing the recent data, ACEH has re-evaluated the data and recommendations presented in the above-mentioned reports, in conjunction with the case files, to determine if the site is eligible for closure as a low risk site under the LTCP. Based on ACEH staff review, we have determined that the site fails to meet the LTCP the Media-Specific Criteria for Vapor Intrusion to Indoor Air (see Geotracker for an updated list).

Therefore, at this juncture ACEH requests that you prepare a Data Gap Investigation Work Plan that is supported by a focused Site Conceptual Model (SCM) to address the Technical Comments provided below.

TECHNICAL COMMENTS

1. **LTCP Media Specific Criteria for Vapor Intrusion to Indoor Air** – The LTCP describes conditions, including bioattenuation zones, which if met will assure that exposure to petroleum vapors in indoor air will not pose unacceptable health risks to human occupants of existing or future site buildings, and adjacent parcels. Appendices 1 through 4 of the LTCP criteria illustrate four potential exposure scenarios and describe characteristics and criteria associated with each scenario.

Our review of the case files indicates that the site data collection and analysis fail to support the requisite characteristics of one of the four LTCP vapor scenarios. Specifically, due to the detection of multiple gasoline related compounds in soil vapor, at increasing concentrations, at a former heating oil UST, and due to the lack of appropriate analytical data for gasoline in soil and oxygen concentrations of less than 4%, it cannot be determined if a minimum continuous 5 foot zone is present with less than 100 milligrams per kilogram (mg/kg) TPH (combined TPHg and TPH as diesel or TPHd) at the site. Please be aware that the LTCP requires TPH to be measured in at least two depths within the five-foot depth zone, and that discolored soil appears to have been described in two of the soil bore logs.

Therefore, please present a strategy in the Data Gap Investigation Work Plan described in Technical Comment 3 below to collect additional data to satisfy the bioattenuation zone characteristics of Scenarios 1, 2 or 3, or to collect additional soil vapor data to satisfy Scenario 4.

2. **Presence of 1,1,2-TCA** - The presence of 1,1,2-TCA is also unusual, may potentially be related to the recent remodeling activities at the site as surmised in the report; however, due to the elevated vapor concentration (several orders of magnitude above the residential ESL), it appears appropriate to request an additional vapor sampling event (soil and crawl space) at the site to eliminate the potential for induced contamination from either the laboratory or other unusual sources or reasons, or to determine if additional actions, that would be protective of the residence, are appropriate.
3. **Data Gap Investigation Work Plan and Focused Site Conceptual Model** – Please prepare Revised Data Gap Investigation Work Plan to address the technical comments listed above. Please support the scope of work in the Revised Data Gap Investigation Work Plan with a focused SCM and Data Quality Objectives (DQOs) that relate the data collection to each LTCP criteria. For example please clarify which scenario within each Media-Specific Criteria a sampling strategy is intended to apply to.

In order to expedite review, ACEH requests the focused SCM be presented in a tabular format that highlights the major SCM elements and associated data gaps, which need to be addressed to progress the site to case closure under the LTCP.

TECHNICAL REPORT REQUEST

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

- **March 25, 2016** – Data Gap Investigation Plan and Focused Site Conceptual Model
(File to be named: RO3143_WP_SCM_R_yyyy-mm-dd)

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.

Responsible Parties
RO0003143
January 20, 2016, Page 3

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations and
Electronic Report Upload (ftp) Instructions

cc: Henry Pietropaoli, Stellar Environmental Solutions, Inc, 2198 Sixth Street, Suite 201, Berkeley, CA 94710, (sent via electronic mail to hpietropaoli@stellar-environmental.com)

Richard Makdisi, Stellar Environmental Solutions, Inc, 2198 Sixth Street, Suite 201, Berkeley, CA 94710, (sent via electronic mail to : rmakdisi@stellar-environmental.com)

Dilan Roe, ACEH, (sent via electronic mail to: dilan.roe@acgov.org)

Mark Detterman, ACEH, (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

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.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

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.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

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

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- 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)

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 deh.loptoxic@acgov.org
 - 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, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - 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 deh.loptoxic@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 @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) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.