



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

May 13, 2011

Mr. Phillip Jaber
George H. Jaber Trust
2801 Encinal Avenue
Alameda, CA 94501-4726

Subject: Pilot Test Approval with Modifications; Interim Remedial Action Plan; Fuel Leak Case No. RO00000373 Olympic Station (Global ID #T0600102256), 1436 Grant Avenue, San Lorenzo, CA 94580

Dear Mr. Jaber:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Feasibility Analysis / Interim Remedial Action Plan*, dated March 15, 2011, and the *Interim Remedial Action Plan Addendum*, dated April 22, 2011. Both reports were prepared on your behalf by Stratus Environmental, Inc. (Stratus), based on several email exchanges. Thank you for submitting the reports. Other recent work (*Additional Site Investigation Report*, Dated June 14, 2010, by Conestoga-Rovers & Associates) aided in defining the extent of impacted soil and groundwater in the site vicinity, and identified a number of data gaps. The previous letter from ACEH (January 28, 2011) requested investigation of these data gaps in order to help identify appropriate future corrective actions at the site. A recent change in consultants to Stratus has resulted in a request to focus next steps at the site on pilot testing of interim remedial actions prior to investigation of the sub-slab vapor survey data gap investigation. As a consequence, Technical Comment 1 of the January 2011 ACEH letter (sub-slab vapor survey work plan request) has been temporarily suspended; it is perceived that pilot testing of selected interim remedial options will benefit the site, vicinity, and occupants. The sub-slab sampling data gap will be re-evaluated at a future date. However, please be aware that Technical Comment 2 (Utility Lateral Preferential Pathway Survey) remains due as this has a potential to impact portions of the pilot tests, and is consequently included in the technical comments below.

TECHNICAL COMMENTS

1. **Pilot Testing; Interim Remedial Actions** - The *Feasibility Analysis / Interim Remedial Action Plan*, evaluated five potential remedial options and selected Dual Phase Extraction (DPE) as most appropriate, and proposed a 30-day pilot test, based on previous pilot test permitting experience with the Bay Area Air Quality Management District (BAAQMD). Subsequent to the submittal of this report, Stratus communicated with the BAAQMD and determined that due to the nearby presence of Arroyo High School, the BAAQMD could not issue a permit for greater than 5 continuous days. As a consequence, Stratus submitted the *Interim Remedial Action Plan Addendum* with the intent to additionally evaluate another potentially viable remedial alternative, ozone injection / sparging. The decision to conduct pilot tests on both methods is generally acceptable with the additions and modifications described below.
 - a. **Dual Phase Extraction** – The three extraction wells proposed for installation are currently planned to be installed to 20 feet below grade surface (bgs), with 15 foot screen lengths. Please ensure groundwater samples are collected from the developed extraction wells and site wells MW-3 and MW-4 prior to pilot test startup to establish a baseline of groundwater concentrations at startup. It is understood that post-pilot test

sampling of groundwater will occur in conjunction with the ozone injection pilot test. While presumed included in pilot test tasks but not described in the feasibility analysis, please also ensure the monitoring of induced vacuums, employing a minimum of three to four steps, at all appropriate monitoring points (monitoring wells and injection wells) to assist in the determination of the radius-of-influence for the system. Monitoring frequency should be higher at the beginning of the steps, with a subsequent reduction commensurate with the rate of change.

- b. **Ozone Injection** – For the pilot test, two injection wells are proposed for installation at the site, with differing completion depths based on data generated at nearby existing wells. While presumed, please also incorporate into the design of the injection well the data generated during the installation of the extraction wells discussed above.

Because of the acknowledged potential for vapor migration during pilot testing, ACEH also requests the installation of a permanent soil vapor probe adjacent to the onsite building in proximity to the water service lateral that extends from Grant Avenue to the building.

ACEH requests that this vapor point, in addition to all vapor points, be instrumented and monitored for soil vapor and ozone concentrations during the pilot test to preclude vapor intrusion in to both vicinity buildings (with associated health risks), as well as assisting in the definition of the radius of influence of the ozone system. While presumed included in pilot test tasks but not described in the feasibility analysis, please also ensure displacement monitoring of the depth to groundwater is conducted after startup, at all groundwater monitoring points, at appropriate intervals as described next. Please also monitor the vapor points at appropriate intervals, employing shorter intervals at the beginning of the test, with a subsequent reduction commensurate with the rate of change in these measurements; and thereafter in conjunction with planned monitoring intervals of the performance indicator wells (EX-1, MW-3, and MW-4).

Please submit an addendum to the Interim Remedial Action Plans to incorporate installation of a vapor point by the date identified below; providing installation and sampling protocols that conform to DTSC guidelines. This is not intended to preclude initiation of other approved work at the site if done on a timely basis.

In addition to the monitoring of groundwater pH as a proxy to changes in groundwater chemistry, ACEH additionally requests the inclusion of Cr⁺⁶, as well as arsenic, and the remainder of analytes listed in Table 1 of the addendum, in the monitoring effort. It is noted that the natural pH range at the site (6.7 to 6.9 pH units) is only slightly different than that proposed (6.5 to 8.5 pH units) as being a trigger for further action. The collection of appropriate data at this stage may minimize these needs at a future point, and will provide a baseline for the site.

2. **Utility Lateral Preferential Pathway Survey** – As noted above, please account for all utility laterals to existing (or any previous, should they have existed) buildings. Locating these laterals will assist in precluding potential health concerns associated with the pilot tests discussed in this letter. As noted previously the sanitary sewer laterals have not been located on figures included in the referenced reports and these, as well as other laterals, also have the potential to affect the migration of ozone as well as a sub-slab vapor survey. The lineament created by bore locations with elevated concentrations of soil, groundwater, or soil vapor (B-8, BH-C, SV-1, and BH-B) can suggest a conduit, or may be a function of bore placement.
3. **Geotracker Well Survey** – At this time, only one well has been surveyed to Geotracker well survey standards at the site, a state requirement. The new extraction wells are proposed for such a survey; however, ACEH again confirms and requests this be extended to all existing site wells and vapor points, including all new extraction and injection wells. Please also upload the resulting GEO_XY and GEO_Z data files to Geotracker.

Mr. Phillip Jaber
RO0000373
May 13, 2011, Page 3

TECHNICAL REPORT REQUEST

Please submit the following deliverable to ACEH (Attention: Mark Detterman), according to the following schedule:

- **June 24, 2011** – Work Plan Addendum (Soil Vapor)
- **August 5, 2011** – Groundwater Monitoring Report
- **August 12, 2011** – Interim Remediation Results Report (Pilot Study)
- **90 Days After Approval of Interim Remediation Results Report** – Status Report

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.

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 E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

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

cc: Stephen Carter, Stratus Environmental, Inc, 3330 Cameron Park Drive, Suite 550, Cameron Park, CA 95682 (sent via electronic mail to: scarter@stratusinc.net)

Gowri Kowtha, Stratus Environmental, Inc, 3330 Cameron Park Drive, Suite 550, Cameron Park, CA 95682 (sent via electronic mail to: gkowtha@stratusinc.net)

Donna Drogos, ACEH, (sent via electronic mail to donna.drogos@acgov.org)

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

Geotracker, Electronic File

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: July 20, 2010
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 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.